

Resource Allocation Review



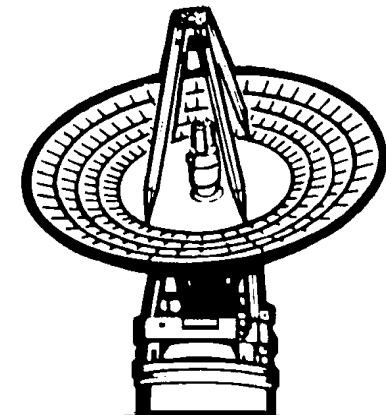
Resource Contention

Version 2.1

2002 - 2011

William Hincy

August 14, 2001



Resource Allocation Review Agenda

◆ Loading Study

- Changes in Requirements
- User / Mission Planning Set
- DSN Antenna Implementation
- DSN Major Downtimes

◆ Periods of Contention

◆ Requirements Analysis and Recommendations

- 2002 - 2004 Activities in Contention / Recommendations

Resource Allocation Review Loading Study

Changes in Requirements

◆ New Projects / Major Changes

- Europa Orbiter launch moved to 03/15/08
- Galileo extended end of extended mission to 09/21/03
- Genesis launched on 08/08/01
- Integral launch moved to 10/17/02
- MAP extended end of extended mission to 10/01/06
- Mars Express Orbiter launch moved to 05/23/03
- Mars Global Surveyor extended end of extended mission to 06/01/04
- Mars Reconnaissance Orbiter moved launch to 08/08/05
- Messenger launch moved to 03/10/04
- MUSES-C launch moved to 12/14/02
- StarLight launch moved to 06/06/06
- Stereo launch moved to 11/12/05

Resource Allocation Review Loading Study

Changes in Requirements (Continued)

- ◆ **Changes in DSN Resource Support Requests**
 - Contour modified requirements in 2002 - 2008
 - Deep Impact modified requirements in 2004 - 2005
 - Galileo increased requirements in 2003
 - Lunar-A reinstated
 - Mars Exploration Rover A modified requirements in 2003 - 2004
 - Mars Exploration Rover B modified requirements in 2003 - 2004
 - Mars 01 Odyssey modified requirements in 2002 - 2003
 - Nozomi modified requirements in 2002 - 2004
 - Space VLBI modified requirements in 2007 - 2012



Resource Allocation Review Loading Study

DSN User / Mission Planning Set - Ongoing Projects

Project	Acronym	Launch or Start	EOPM	EOEM
DSN VLBI Clock Sync and Catalog M&E	DSN	--	--	--
DSS Maintenance	DSS	--	--	--
European VLBI Network	EVN	--	--	--
Ground Based Radio Astronomy	GBRA	--	--	--
Space Geodyssey	SGP	--	--	--
Voyager 2	VGR2	08/20/77	10/15/89	12/31/19
Voyager 1	VGR1	09/05/77	12/31/80	12/31/19
Goldstone Solar System Radar	GSSR	04/01/85	--	--
Galileo	GLLO	10/18/89	12/07/97	09/21/03
Ulysses	ULYS	10/06/90	09/11/95	12/31/04
ISTP - Geotail	GTL	07/24/92	07/24/95	09/30/05
ISTP - Wind	WIND	11/01/94	11/01/97	09/30/05
Space VLBI	SVLB	02/01/95	12/31/03	- - -
ISTP - SOHO	SOHO	12/02/95	05/02/98	12/30/05



Resource Allocation Review Loading Study

DSN User / Mission Planning Set - Ongoing Projects (Continued)

Project	Acronym	Launch or Start	EOPM	EOEM
ISTP - Polar	POLR	02/22/96	08/23/97	09/30/05
Gravity Probe B	GPB	06/01/96	10/31/03	TBD
Mars Global Surveyor	MGS	11/07/96	02/01/01	06/01/04
Highly Advanced Laboratory for Communications and Astronomy	VSOP	02/12/97	09/30/01	02/28/02
Advance Composition Explorer	ACE	08/25/97	02/01/01	01/31/05
Cassini	CAS	10/15/97	06/30/08	06/30/10
Nozomi (Planet-B)	NOZO	07/03/98	12/31/05	TBD
Deep Space 1	DS1	10/24/98	09/19/99	12/06/01
Stardust	SDU	02/07/99	01/14/06	- - -
Chandra X-ray Observatory	CHDR	07/23/99	07/23/04	07/23/09
Imager for Magnetopause-to-Aurora Global Exploration	IMAG	03/25/00	05/30/02	05/30/04
Cluster 2 - S/C #2 (Samba)	CLU2	07/16/00	02/15/03	09/19/05
Cluster 2 - S/C #3 (Rumba)	CLU3	07/16/00	02/15/03	09/19/05
Cluster 2 - S/C #1 (Salsa)	CLU1	08/09/00	02/15/03	09/19/05



Resource Allocation Review Loading Study

DSN User / Mission Planning Set - Ongoing Projects (Continued)

Project	Acronym	Launch or Start	EOPM	EOEM
Cluster 2 - S/C #4 (Tango)	CLU4	08/09/00	02/15/03	09/19/05
2001 Mars Odyssey	M01O	04/07/01	08/01/04	09/19/07
Microwave Anisotropy Probe	MAP	06/30/01	10/01/03	10/01/06
Genesis	GNS	08/08/01	09/08/04	---
Comet Nucleus Tour (CONTOUR)	CNTR	07/01/02	09/05/08	TBD
Space Infrared Telescope Facility	SRTF	07/15/02	09/14/07	---
RadioAstron*	RADA	10/01/02	10/01/07	TBD
International Gamma Ray Astrophysics Lab	INTG	10/17/02	12/18/04	12/18/07
MUSES - C	MUSC	12/14/02	06/05/07	---
Rosetta	ROSE	01/13/03	07/10/13	---
Mars Express Orbiter	MEX	05/23/03	02/11/06	08/03/08
Mars Exploration Rover - A	MERA	05/30/03	04/06/04	---
Mars Exploration Rover - B	MERB	06/27/03	05/10/04	---
Deep Impact	DEEP	01/02/04	08/05/05	---



Resource Allocation Review Loading Study

DSN User / Mission Planning Set - Advanced Planning Projects

Project	Acronym	Launch or Start	EOPM	EOEM
Lunar - A	LUNA	08/09/03	03/03/04	---
Messenger	MSGR	03/10/04	04/06/10	---
Mars Reconnaissance Orbiter	MRO	08/08/05	12/31/10	
Stereo Ahead	STA	11/12/05	02/18/08	02/18/11
Stereo Behind	STB	11/12/05	02/18/08	02/18/11
StarLight	SL	06/06/06	11/30/06	---
Mars Smart Lander 2007	M07L	09/04/07	08/19/10	TBD
Mars Competed Scout 2007	M07S	09/04/07	11/19/08	TBD
Mars CNES Orbiter 2007	M07O	09/09/07	08/11/08	08/12/10
Mars ASI/NASA Telecommunications Orbiter 2007	M07T	09/09/07	08/09/18	TBD
ARISE	ARSE	01/01/08	01/01/13	---
Highly Advanced Laboratory for Communications and Astronomy	VSP2	01/01/08	01/01/13	---
Europa Orbiter	EURO	03/15/08	03/10/12	TBD
Mars ASI/NASA Science Orbiter 2009	M09O	10/04/09	08/29/12	TBD



Resource Allocation Review Loading Study

DSN User / Mission Planning Set - Advanced Planning Projects (Continued)

Project	Acronym	Launch or Start	EOPM	EOEM
Mars CNES MSR Lander 2011	M11L	10/30/11	09/10/14	TBD
Mars CNES MSR Orbiter 2011	M11O	10/30/11	07/22/14	TBD

Resource Allocation Review Loading Study

◆ Changes in DSN Antenna Implementation

- 70M and 34HEF Ka-Band Downlink Capability changed to TBD
- DSS-24 X-Band Uplink Capability changed to 05/01/2003
- DSS-24 Ka-Band Downlink Capability changed to 10/01/2005
- DSS-26 First Delivery Date changed to 04/02/2003
- DSS-33 and DSS-53 closure date changed to 02/01/2002
- DSS-34 Ka-Band Downlink Capability changed to 01/01/2005
- DSS-54 Ka-Band Downlink Capability changed to 08/01/2006
- DSS-55 Added - First Delivery Date set to 11/01/2003



Resource Allocation Review Loading Study

Major DSN Downtimes - 2002

Site	Description	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 66	Servo Hydraulic Drive Replacement	06/24/02	07/21/02	28	26-29	175	202
DSS 14	70M Servo Drive Upgrade	07/15/02	09/27/02	75	29-39	196	270
DSS 14	NIB - NSP Implementation	07/15/02	09/27/02	75	29-39	196	270
DSS 24	NSP Implementation	10/01/02	11/22/02	53	40-47	274	326
DSS 45	NSP Implementation	10/01/02	11/22/02	53	40-47	274	326
DSS 54	NSP Implementation	10/01/02	11/22/02	53	40-47	274	326
DSS 24	NIB - 20 KW X-Band Txr Installation	10/01/02	11/22/02	53	40-47	274	326
DSS 24	NIB - KA-Band Encoder Mech Mod-Kit Installation	10/01/02	10/20/02	20	40-42	274	293
DSS 54	NIB - KA Band Encoder Mech Mod Kit Installation	10/01/02	10/20/02	20	40-42	274	293
DSS 43	70M Servo Drive Upgrade	11/25/02	02/09/03	77	48-06	329	040
DSS 43	NIB - Ball-Joint Pad Refurbishment	11/25/02	02/09/03	77	48-06	329	040
DSS 43	NIB - NSP Implementation	12/02/02	02/09/03	70	49-06	336	040
DSS 65	NSP Implementation	12/02/02	02/09/03	70	49-06	336	040



Resource Allocation Review Loading Study

Major DSN Downtimes - 2003

Site	Description	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 63	70M Servo Drive Upgrade	02/10/03	04/20/03	70	07-16	041	110
DSS 63	NIB - Ball-Joint Pad Refurbishment	02/10/03	04/20/03	70	07-16	041	110
DSS 63	NIB - NSP Implementation	02/10/03	04/06/03	56	07-14	041	096
DSS 25	NSP Implementation	02/10/03	04/06/03	56	07-14	041	096
DSS 34	NSP Implementation	02/10/03	04/06/03	56	07-14	041	096
DSS 25	NIB - 20 KW X-Band Txr Installation	02/10/03	04/06/03	56	07-14	041	096
DSS 34	NIB - 20 KW X-Band Txr Installation	02/10/03	04/06/03	56	07-14	041	096
DSS 34	NIB - KA-Band Encoder Mech Mod-Kit Installation	02/10/03	03/02/03	21	07-09	041	061
DSS 15	Antenna Controller Replacement	03/03/03	05/04/03	63	10-18	062	124
DSS 15	NIB - NSP Implementation	04/01/03	05/01/03	31	14-18	091	121
DSS 46	Servo Hydraulic Drive Replacement	05/05/03	06/01/03	28	19-22	125	152
DSS 45	Antenna Controller Replacement	09/08/03	10/25/03	48	37-43	251	298



Resource Allocation Review Loading Study

Proposed DSN Downtimes - 2003, 2004

Site	Description	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
DSS 54	20 KW X-Band Txr Installation	07/21/03	08/31/03	42	30-35	202	243
DSS 14	Antenna Controller Replacement	07/05/04	10/03/04	91	28-40	187	277
DSS 65	Antenna Controller Replacement	05/10/04	06/27/04	49	20-26	131	179



Resource Allocation Review Loading Study

TMOD Resource Implementation Planning Matrix

Station	Subnet	First Delivery Date	S-Band Down	S-Band Up	X-Band Down	X-Band Up	Ka-Band Down	Ka-Band Up	Ku-Band Up and Down	Close
DSS-14	70M	XXXX	XXXX	XXXX	XXXX	XXXX	TBD	N/A	N/A	N/A
DSS-15	34HEF	XXXX	XXXX	N/A	XXXX	XXXX	TBD	N/A	N/A	N/A
DSS-16	26M	XXXX	XXXX	XXXX	N/A	N/A	N/A	N/A	N/A	N/A
DSS-24	34B1	XXXX	XXXX	XXXX	XXXX	5/1/2003	10/1/2005	N/A	N/A	N/A
DSS-25	34B2	XXXX	N/A	N/A	XXXX	XXXX	XXXX	XXXX	N/A	N/A
DSS-26	34B2	4/2/2003	N/A	N/A	4/2/2003	4/2/2003	4/2/2003	N/A	N/A	N/A
DSS-27	34HSB	XXXX	XXXX	XXXX	N/A	N/A	N/A	N/A	N/A	N/A
DSS-33	11M	XXXX	N/A	N/A	XXXX	XXXX	N/A	N/A	XXXX	2/1/2002
DSS-34	34B1	XXXX	XXXX	XXXX	XXXX	XXXX	1/1/2005	N/A	N/A	N/A
DSS-43	70M	XXXX	XXXX	XXXX	XXXX	XXXX	TBD	N/A	N/A	N/A
DSS-45	34HEF	XXXX	XXXX	N/A	XXXX	XXXX	TBD	N/A	N/A	N/A
DSS-46	26M	XXXX	XXXX	XXXX	N/A	N/A	N/A	N/A	N/A	N/A
DSS-53	11M	XXXX	N/A	N/A	XXXX	XXXX	N/A	N/A	XXXX	2/1/2002
DSS-54	34B1	XXXX	XXXX	XXXX	XXXX	XXXX	8/1/2006	N/A	N/A	N/A
DSS-55	34B2	11/1/2003	N/A	N/A	11/1/2003	11/1/2003	11/1/2003	N/A	N/A	N/A
DSS-63	70M	XXXX	XXXX	XXXX	XXXX	10/11/2001	TBD	N/A	N/A	N/A
DSS-65	34HEF	XXXX	XXXX	N/A	XXXX	XXXX	TBD	N/A	N/A	N/A
DSS-66	26M	XXXX	XXXX	XXXX	N/A	N/A	N/A	N/A	N/A	N/A
XXXX = Capability Currently Exists N/A = Capability Not Planned										8/9/2001



Resource Allocation Review Periods of Contention

<u>Item</u>	<u>Year</u>	<u>Period</u>	<u>Weeks</u>	<u>Subnet</u>
01	2002	Mid-June	24	70M
02	2002	Late March	12	34BWG1
03	2002	Mid-December	50	34BWG1



Resource Allocation Review Periods of Contention

(Continued)

<u>Item</u>	<u>Year</u>	<u>Period</u>	<u>Weeks</u>	<u>Subnet</u>
04	2003	Mid-February - Early April	07 - 14	DSS-14, 43
05	2003	Late May	21	70M
06	2003	Mid-June - Mid-July	25 - 29	70M
07	2003	Late July - August	30 - 35	70M
08	2003	Early September	36 - 37	70M
09	2003	Mid-September - Mid-October	38 - 42	70M
10	2003	Late October - Mid-November	43 - 46	70M
11	2003	Mid-November - Early December	47 - 49	70M
12	2003	December	50 - 52	70M
13	2003	Late May - Mid-June	22 - 25	34HEF
14	2003	Late June - Mid-July	26 - 29	34HEF
15	2003	Late July - August	30 - 35	34HEF
16	2003	Late October - Mid-November	43 - 46	34HEF
17	2003	Mid-November - Early December	47 - 49	34HEF
18	2003	December	50 - 52	34HEF
19	2003	Early February	06	34BWG1
20	2003	Late June - Mid-July	26 - 29	34BWG1
21	2003	Late July - August	30 - 35	34BWG1
22	2003	Late October - Mid-November	43, 47	34BWG1



Resource Allocation Review Periods of Contention

(Continued)

<u>Item</u>	<u>Year</u>	<u>Period</u>	<u>Weeks</u>	<u>Subnet</u>
23	2003	December	50 - 52	DSS-34
24	2003	Early June	27	DSS-25
25	2003	Late July - August	30 - 35	34BWG2
26	2003	Late July - August	30 - 35	34HSB
27	2003	Late September - Mid-December	39 - 51	34HSB
28	2003	Late December	52	34HSB
29	2003	May	19 - 22	DSS-16, 66
30	2003	Late July - August	30 - 35	26M
31	2003	Late September - Mid-December	39 - 51	26M



Resource Allocation Review Periods of Contention

(Continued)

<u>Item</u>	<u>Year</u>	<u>Period</u>	<u>Weeks</u>	<u>Subnet</u>
32	2004	January	01	70M
33	2004	January	02	70M
34	2004	January	03	70M
35	2004	January	04	70M
36	2004	Late January - Early February	05 - 06	70M
37	2004	Mid-February - Mid-April	07 - 16	70M
38	2004	July - Early October	28 - 40	70M
39	2004	Early October	41	DSS-14, 63
40	2004	Mid-October - Mid-November	42 - 47	70M
41	2004	January	01	34HEF
42	2004	January	02	34HEF
43	2004	January	03	34HEF
44	2004	January	04	34HEF
45	2004	Mid-May - Late June	20 - 26	34HEF
46	2004	January	01	34BWG1
47	2004	January	02	34BWG1
48	2004	January	03	34BWG1
49	2004	January	04	34BWG1
50	2004	Late January	05	DSS-34, 54



Resource Allocation Review Periods of Contention

(Continued)

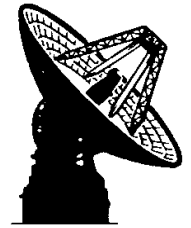
<u>Item</u>	<u>Year</u>	<u>Period</u>	<u>Weeks</u>	<u>Subnet</u>
51	2004	Early March	11	34BWG1
52	2004	Early April	15	34BWG1
53	2004	Mid-April	17	34BWG1
54	2004	Late August	35 - 36	34BWG1
55	2004	December	50 - 53	34BWG1
56	2004	January	01 - 04	34HSB
57	2004	Late January - Early April	05 - 12, 15	34HSB
58	2004	Mid-May - Early August	20 - 32	34HSB
59	2004	Late October - December	44 - 53	34HSB
60	2004	January	01 - 04	26M
61	2004	Mid-February - Late April	07 - 15	26M
62	2004	Mid-May - Mid-July	20 - 29	26M
63	2004	Mid-August - November	33, 37, 41, 45, 49	26M



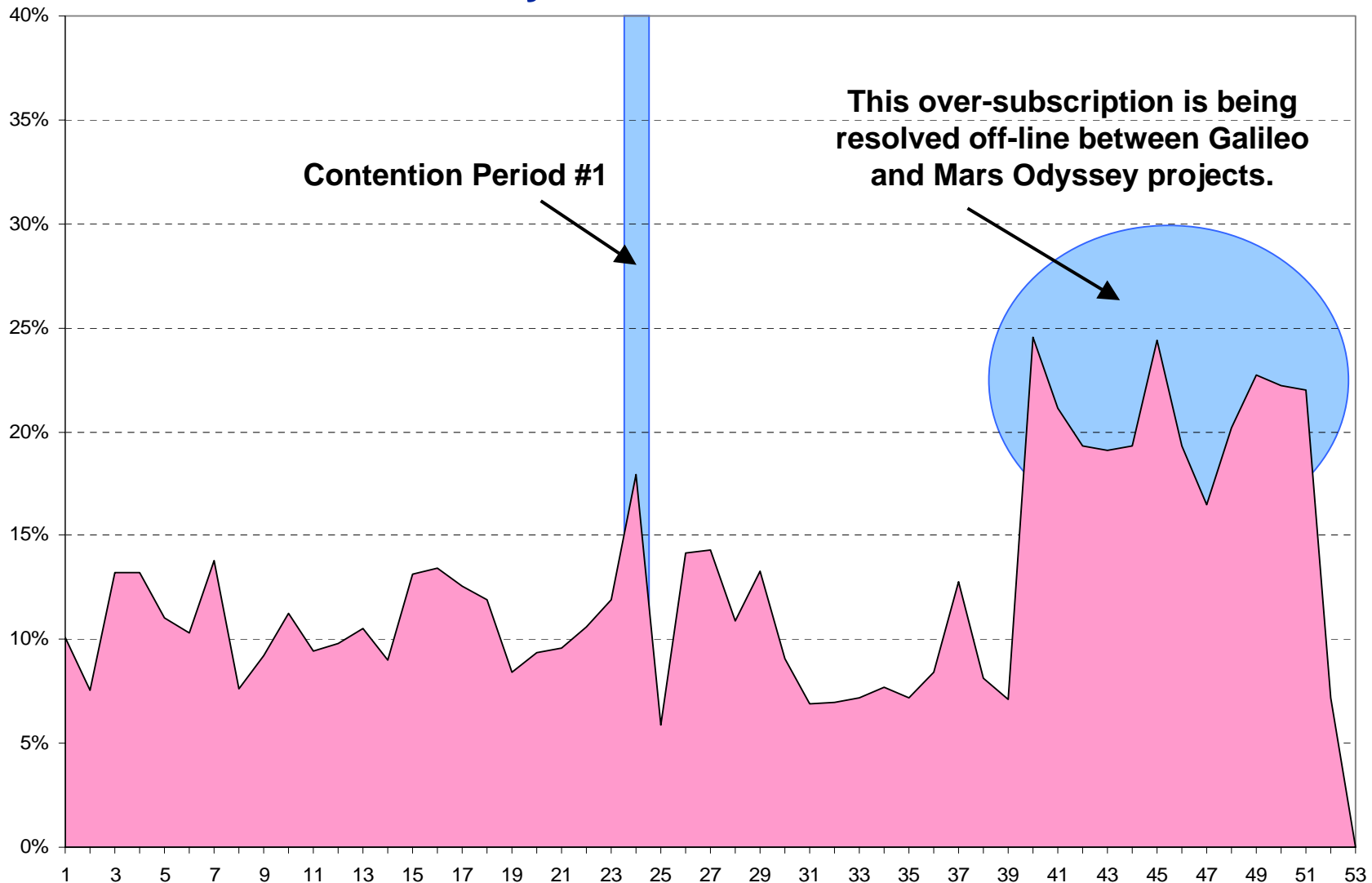
Resource Allocation Review Requirements Analysis and Recommendations

2002 Activities in Contention / Recommendations

Resource Allocation Review Requirements Analysis and Recommendations



2002 Weekly Contention Percent - 70M





Resource Allocation Review

Requirements Analysis and Recommendations

2002 - Contention Period #01 - 70M
Mid-June (Week 24)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	ROUTINE/BEARING/NEGOTIATED MAINT, 6 - 10.5 HRS	6
GLLO	MANUEVER/ROUTINE SUPPORT	14
GSSR	MERCURY SUPPORT, DSS-14, 4 HR	1
M01O	DDOR SUPPORT, 8 - 9 HRS	2
	THEMIS MAPPING SUPPORT, 4 - 7 HRS	12

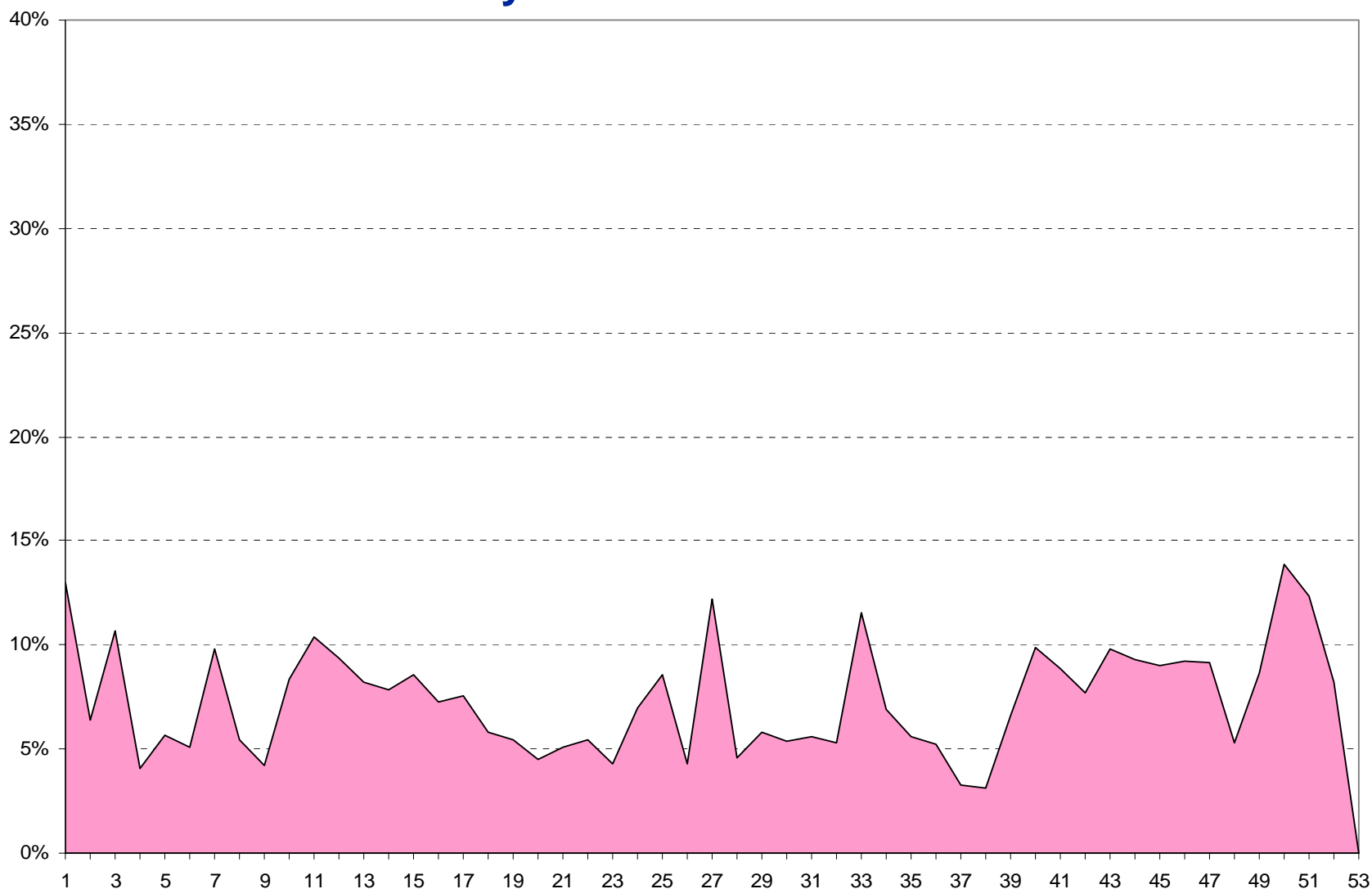
<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REDUCE TO ONE MAINT SUPPORT PER ANTENNA AND KEEP 2-HRS OFF-SHIFT AT DSS-14, 63 (GLLO, M01O)
GLLO	REDUCE SEVEN PASSES TO 4 HRS (DSS, M01O)
GSSR	REQUESTED SUPPORT
M01O	REQUESTED SUPPORT

Note: DSS-14 and 63 has agreed to 2-hr Off-Shift Maintenance at the February 2001 RARB.

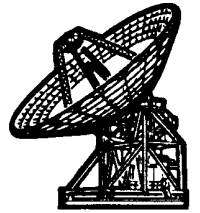
Resource Allocation Review Requirements Analysis and Recommendations



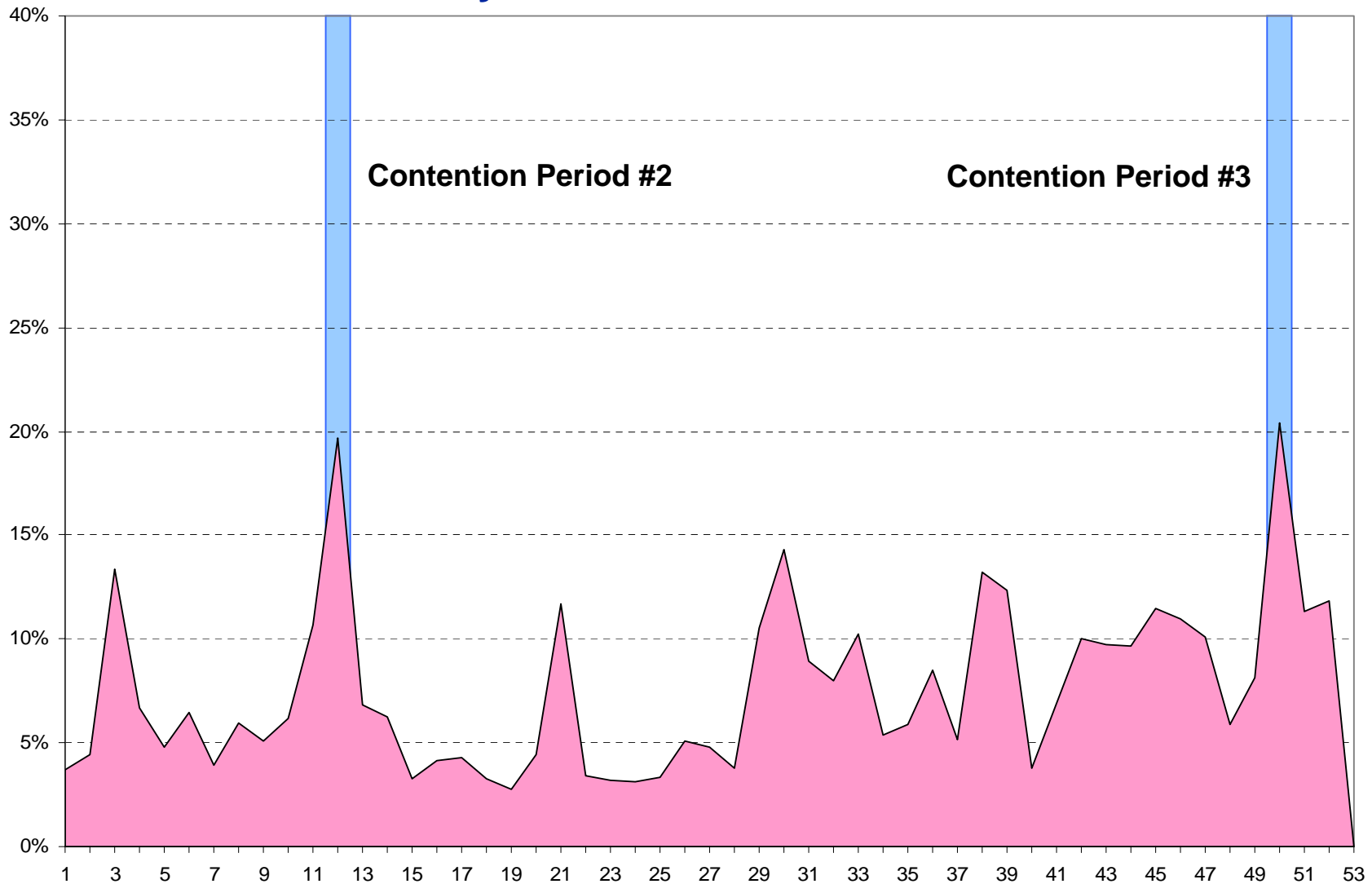
2002 Weekly Contention Percent - 34HEF



Resource Allocation Review Requirements Analysis and Recommendations



2002 Weekly Contention Percent - 34BWG1





Resource Allocation Review

Requirements Analysis and Recommendations

2002 - Contention Period #02 - 34BWG1

Late March (Week 12)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
ACE	ROUTINE SUPPORT, DSS-24, 3.5 HRS	3 - 4
CHDR	ROUTINE SUPPORT, 1 HR	21
CLU1	ROUTINE SUPPORT, DSS-24, 34, 2 HRS	2
CLU2	ROUTINE SUPPORT, DSS-24, 34, 2 HRS	2
CLU4	ROUTINE SUPPORT, DSS-24, 2 HRS	1
DSS	MAINTENANCE, 6 - 8 HRS	3
GNS	ROUTINE/MANEUVER SUPPORT	11
NOZO	ROUTINE SUPPORT, DSS-24, 54	1
VGR1	ROUTINE SUPPORT, DSS-34, 54	4 - 5
VGR2	ROUTINE SUPPORT, DSS-34	7

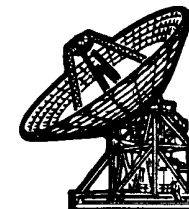


Resource Allocation Review

Requirements Analysis and Recommendations

2002 - Contention Period #02 - 34BWG1

Late March (Week 12) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
ACE	REQUESTED SUPPORT USING DSS-16 (GNS)
CHDR	MOVE 7 PASSES TO DSS-16, 46 (GNS)
CLU1	REQUESTED SUPPORT USING DSS-16 (GNS)
CLU2	REQUESTED SUPPORT USING DSS- 27 (GNS)
CLU4	REQUESTED SUPPORT USING DSS-15, 45 (GNS)
DSS	MOVE DSS-24 MAINTENANCE DAY TO TUESDAY (GNS)
GNS	REQUESTED SUPPORT
NOZO	REQUESTED SUPPORT
VGR1	REQUESTED SUPPORT USING DSS-25 (GNS)
VGR2	REQUESTED SUPPORT USING DSS-43, 45 (GNS)



Resource Allocation Review

Requirements Analysis and Recommendations

2002 - Contention Period #03 - 34BWG1
Mid-December (Week 50)



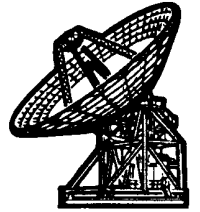
<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
ACE	ROUTINE SUPPORT, DSS-24, 3.5 HRS	3 - 4
CHDR	ROUTINE SUPPORT, 1 HR	21
CLU1	ROUTINE SUPPORT, DSS-24, 34, 2 HRS	2
CLU2	ROUTINE SUPPORT, DSS-24, 34, 2 HRS	2
DSS	ROUTINE MAINTENANCE, 6 - 8 HRS	3
GNS	ROUTINE/MANEUVER SUPPORT	11
NOZO	ROUTINE SUPPORT	9
SRTF	ROUTINE SUPPORT, DSS-34, 54, 1 HR	2 - 3
VGR1	ROUTINE SUPPORT, DSS-54, 4 HRS	3



Resource Allocation Review

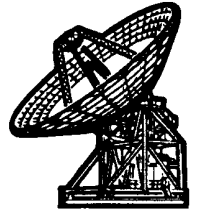
Requirements Analysis and Recommendations

2002 - Contention Period #03 - 34BWG1
Mid-December (Week 50) (Continued)

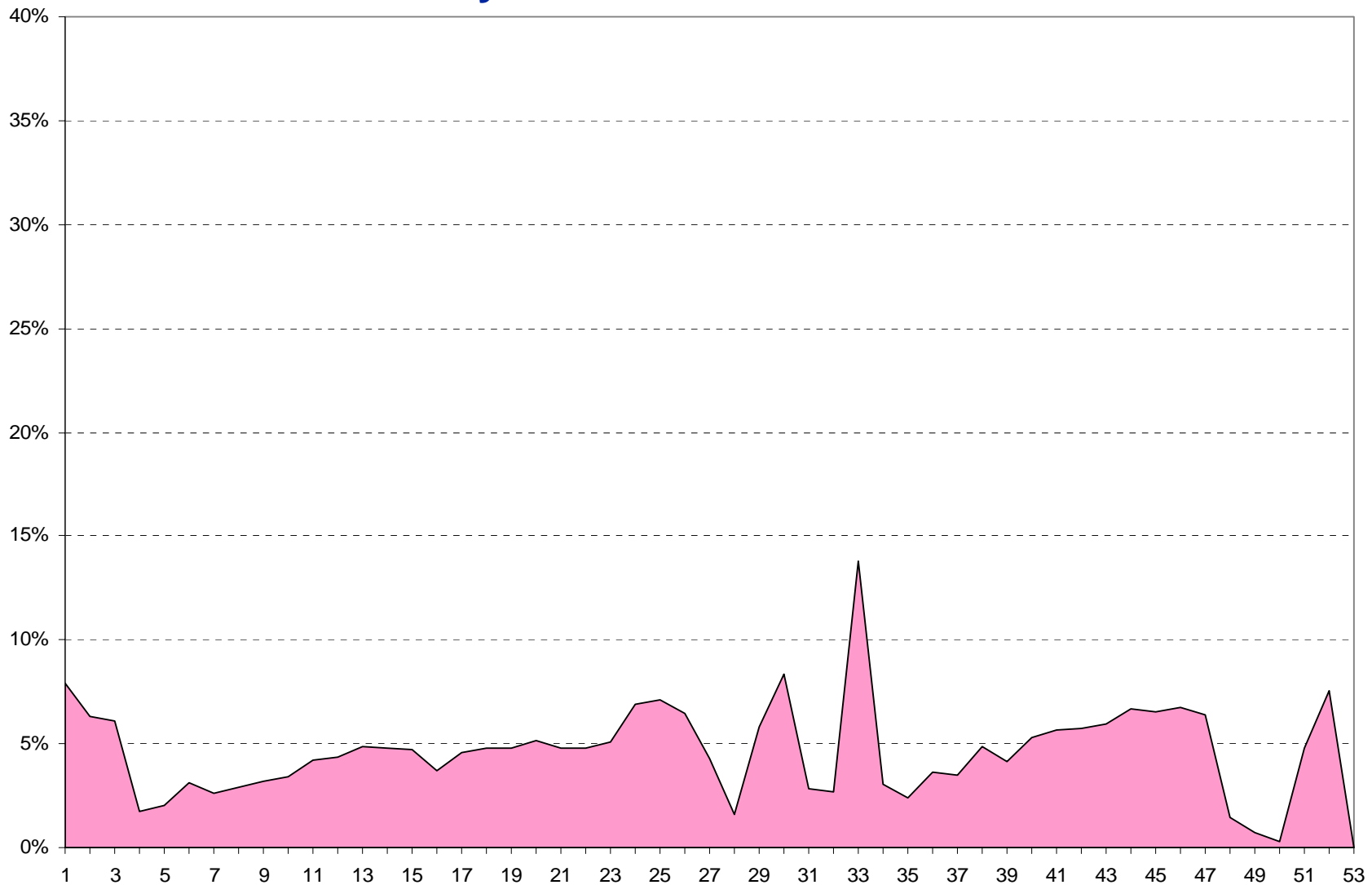


<u>USER</u>	<u>RECOMMENDATION</u>
ACE	REQUESTED SUPPORT USING DSS-27 (GNS)
CHDR	MOVE 7 PASSES TO DSS-16, 46 (GNS)
CLU1	REQUESTED SUPPORT USING DSS-16 (GNS)
CLU2	REQUESTED SUPPORT USING DSS-27 (GNS)
DSS	MOVE DSS-24 MAINTENANCE TO TUESDAY (GNS)
GNS	REQUESTED SUPPORT
NOZO	REQUESTED SUPPORT
SRTF	REQUESTED SUPPORT
VGR1	REQUESTED SUPPORT USING DSS-25 (GNS)

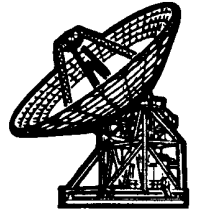
Resource Allocation Review Requirements Analysis and Recommendations



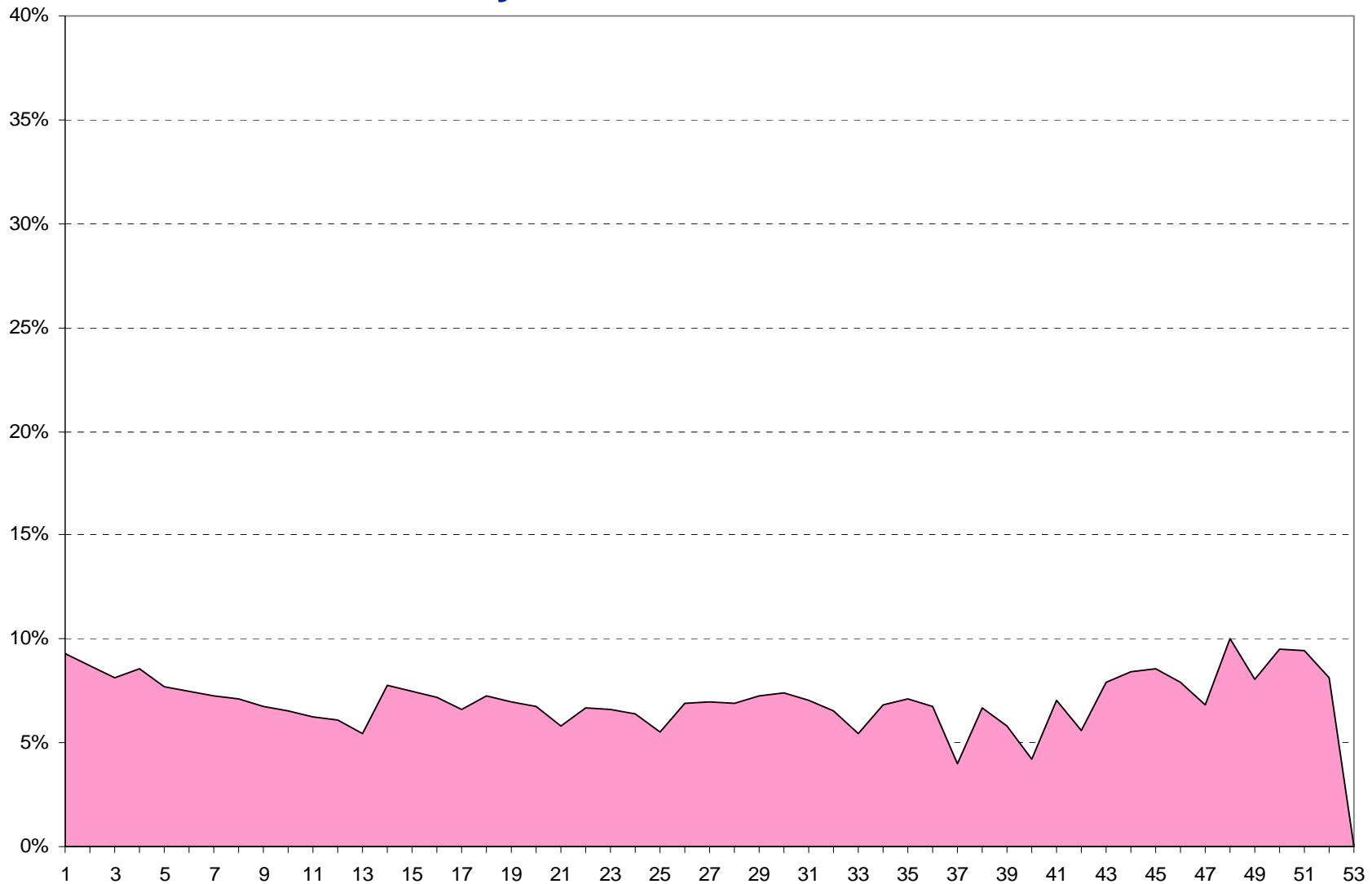
2002 Weekly Contention Percent - 34BWG2



Resource Allocation Review Requirements Analysis and Recommendations



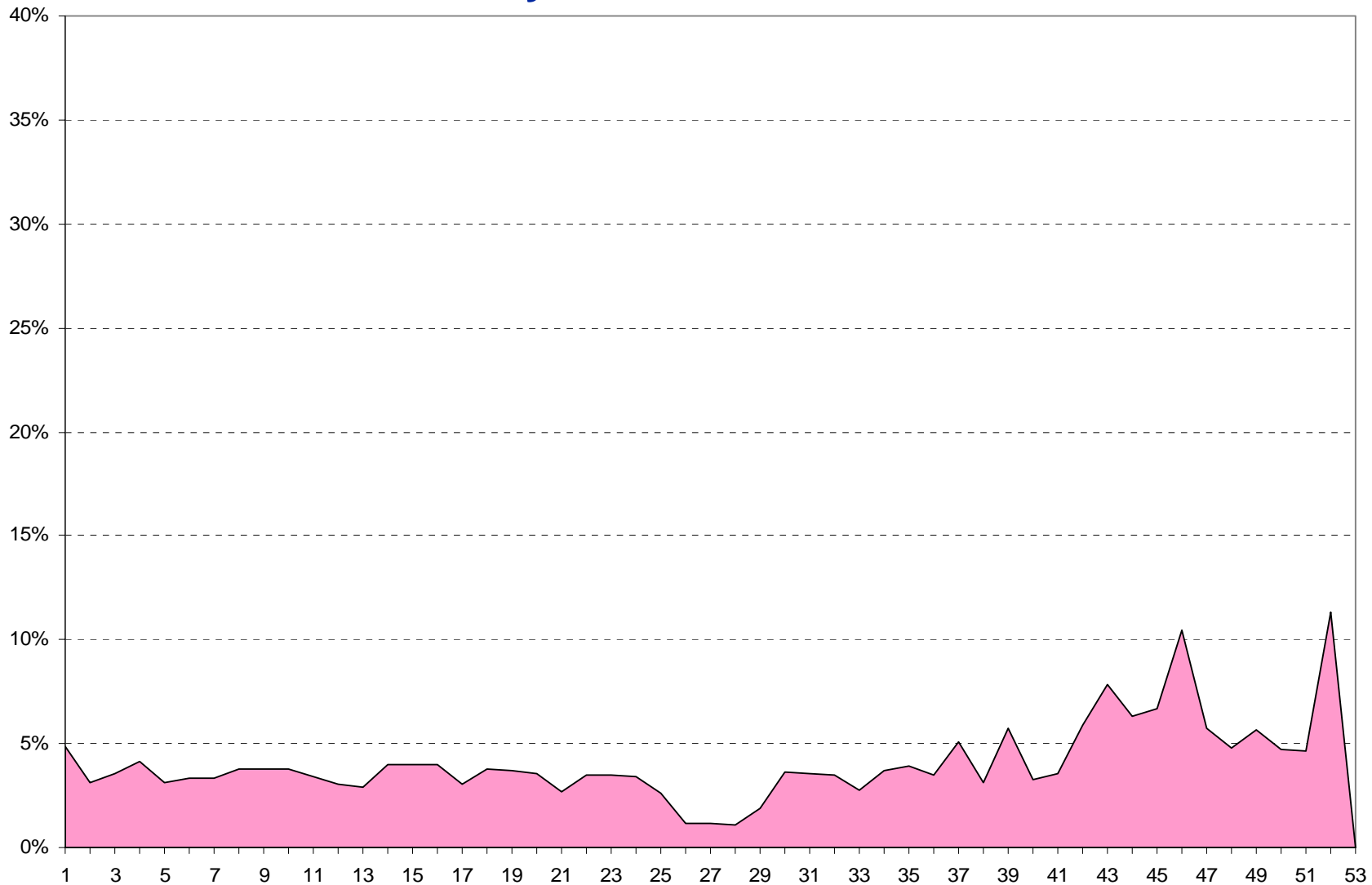
2002 Weekly Contention Percent - 34HSB



Resource Allocation Review Requirements Analysis and Recommendations



2002 Weekly Contention Percent - 26M

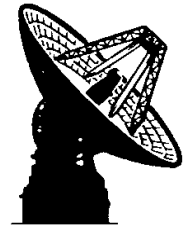




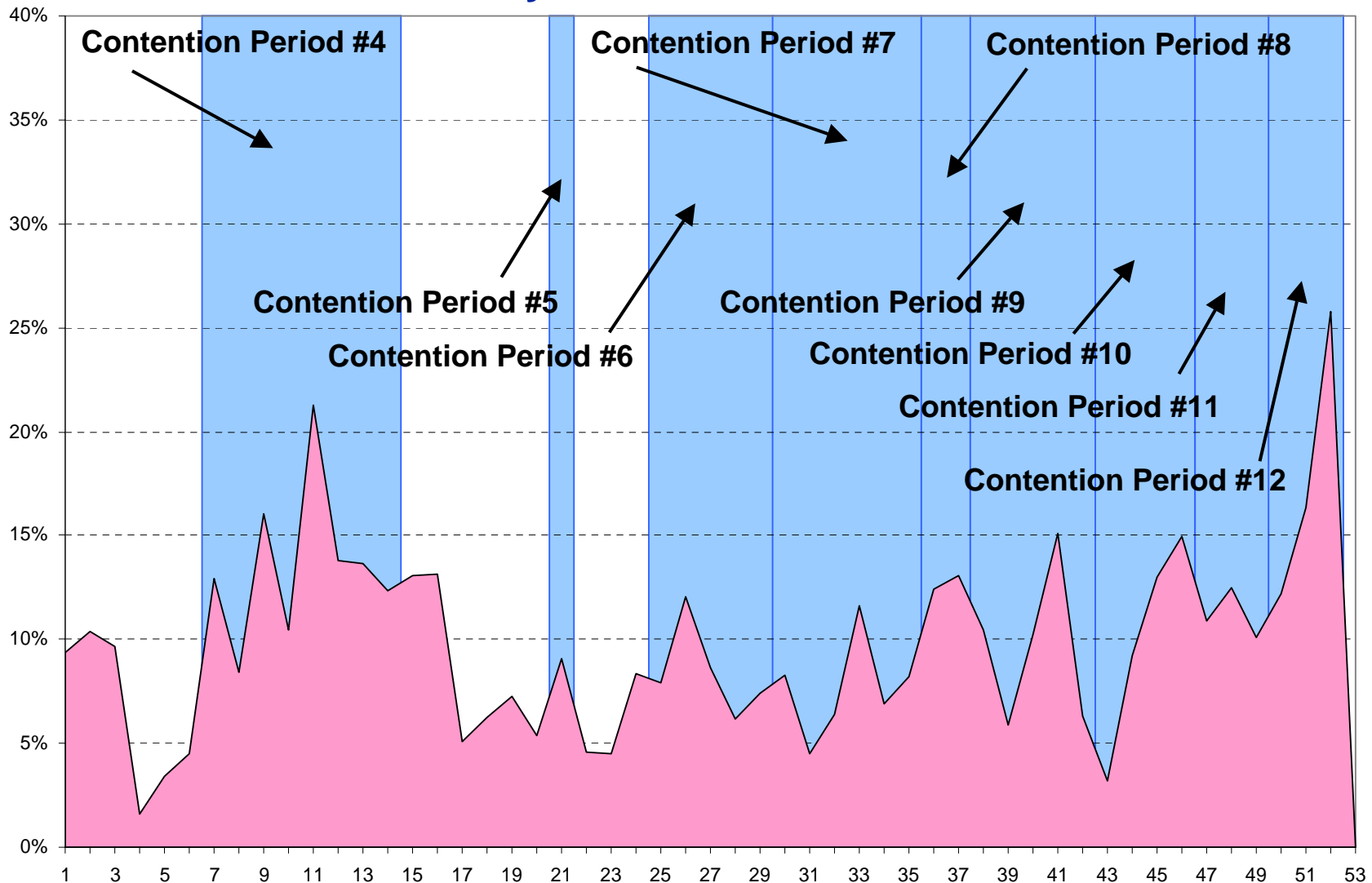
Resource Allocation Review Requirements Analysis and Recommendations

2003 Activities in Contention / Recommendations

Resource Allocation Review Requirements Analysis and Recommendations



2003 Weekly Contention Percent - 70M





Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #04 - DSS-14, 43
Mid-February - Early April (Weeks 07 - 14)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CAS	ROUTINE SUPPORT, DSS-14, 9 HRS	0 - 1
DSS	BEARING/ROUTINE MAINTENANCE	3 - 4
M01O	DDOR SUPPORT, WK 07, 09, 11, 13	1 - 2
	MAPPING, 7 HRS	4 - 8
MAP	ROUTINE SUPPORT, 45 MIN	7
	MANUEVAL DAY, 70M, WK 11	3
MGS	MAPPING/BETA SUPPLEMENT	4 - 5
SOHO	TSO SUPPORT, WK 09, 13, DSS-14, 4 HRS	5
VGR1	ROUTINE SUPPORT, DSS-14	7
	MAGROL, WK 11, DSS-14, 7 HRS	1
VGR2	ROUTINE SUPPORT, DSS-43, 4 HRS	7
	ASCAL, WK 12, DSS-43, 2 HRS	1
	DTR P/B, WK 11, DSS-43, 7.4 HRS	1
	MAGROL, WK 12, DSS-43, 7 HRS	1

Note: DSS-63 is down for 70M Servo Drive Upgrade WK 07 - 16.

Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #04 - DSS-14, 43
Mid-February - Early April (Weeks 7 - 14) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
CAS	REQUESTED SUPPORT
DSS	REDUCE DSS-43 MAINTENANCE TO 2-HRS ON-SHIFT AND 3 HRS OFF-SHIFT AND MOVE DSS-14 MAINTENANCE IN WK 09 TO OFF-SHIFT (M01O, MAP)
M01O	REQUESTED DDOR USING DSS-14, 43, 65 IN WK 7, 11 AND DSS-14, 43 IN WK 9, 13
MAP	REQUESTED MANUEVAL USING DSS-14, 43, 54
MGS	MSPA WITH M01O USING DSS-14, 43, 65 (M01O)
SOHO	MOVE 4 PASSES TO DSS-27 IN WK 09, MOVE 1 PASS TO DSS-24 IN WK 13 (CAS, DSS, M01O)
VGR1	REQUESTED MAGROL, AND REDUCE ROUTINE SUPPORT TO 4-HRS USING 34HEF IN WK 07, REDUCE TO 4-HRS USING DSS-14, 43, 65 IN WK 08, USE 34HEF IN WK 09, USE DSS-14, 45, 63 IN WK 10, REDUCE TO 4-HRS USING DSS-45, 65 IN WK 11, REDUCE TO 4-HRS USING DSS-14, 45, 65 IN WK 12 AND REDUCE TO 4-HRS USING DSS-45, 65 IN WK 13 (CAS, DSS, M01O, MGS)
VGR2	REQUESTED SUPPORT

Note: DSS-63 is down for 70M Servo Drive Upgrade WK 07 - 16.



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #05 - DSS-14
Late May (Week 21)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	BEARING, ROUTINE MAINTENTANCE	3
GBRA	PLANET R/AST, M-WAVE SPECT, 9 HRS	2
GODR	ROUTINE SUPPORT, DSS-14/15	1
GSSR	MERCURY, 5.5 HRS	2

<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REQUESTED SUPPORT
GBRA	REDUCE M-WAVE SPECT AND PLANET R/AST TO 4 HRS (DSS, GSSR MERCURY)
GODR	MOVE SUPPORT TO WK 22 (DSS, GSSR MERCURY)
GSSR	REDUCE SUPPORT TO 4 HRS (DSS)



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #06 - 70M
Mid-June - Mid-July (Weeks 25 - 29)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	ROUTINE/BEARING MAINTENANCE, 6 - 10.5 HRS	5 - 6
GBRA	PLANET R/AST, DSS-14, M-WAVE SPECT, 9 HRS	4
	RADIO STARS WCB, WK 26, DSS-14\63, 14 HRS	1
	RA500 WCB, WK 27, DSS-14\63, 24 HRS	1
	VLBA WCB, WK 27, DSS-14\63	1
	HOST COUNTRY, WK 25, 28-29, DSS-43, 63, 12 - 24 HRS	1
GODR	ROUTINE SUPPORT, WK 25 AND 27, DSS-14/15	1
GSSR	ASTEROID 1998FH12, WK 26, DSS-14, 9 HRS	3
SDU	TCM SUPPORT, WK 25, 4 HRS	14
SOHO	TSO SUPPORT, WK 25, 29, DSS-14, 4 HRS	5
ULYS	ROUTINE SUPPORT, 5 - 10 HRS	3 - 4

Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #06 - 70M
Mid-June - Mid-July (Weeks 25 - 29) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REDUCE DSS-14 AND 63 ROUTINE SUPPORT TO ONE 8-HR AND ONE 6-HR SUPPORT (SDU, SOHO, ULYS, GSSR)
GBRA	REDUCE PLANET R/AST AND M-WAVE SPECT TO 4 HRS REDUCE RADIO STARS TO 10-HRS AND MOVE TO WK 30 SPLIT RA500 INTO THREE 8-HR SUPPORTS AND MOVE TO WK 24 REQUESTED VLBA SUPPORT REQUESTED HOST COUNTRY USING THREE 8-HR SUPPORTS AND MOVE WK 25 SUPPORT TO WK 30 (DSS, SDU, SOHO, ULYS)
GODR	REDUCE SUPPORT TO 6 HRS (DSS)
GSSR	REDUCE ASTEROID FH12 SUPPORT TO 8 HRS (DSS)
SDU	MOVE FOUR PASSES TO DSS-25 (DSS)
SOHO	REQUESTED SUPPORT
ULYS	REQUESTED SUPPORT



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #07 - 70M
Late July - August (Weeks 30 - 35)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	BEARING, ROUTINE MAINTENANCE, 6 - 10.5 HRS	5 - 6
GBRA	PLANET R/AST, DSS-14, M-WAVE SPECT, 9 HRS	4
	VLBA WCB, WK 32, DSS-14\63	1
	RADIO STARS WCB , WK 33, DSS-14\63, 14 HRS	1
	HOST COUNTRY, WK 35, DSS-43, 24 HRS	1
GSSR	ASTEROID 1994PM, WK 33 - 34, DSS-14, 1.8 - 5 HRS	2 - 3
	MARS RADAR, DSS-14/25, 7 HRS	1 - 4
M01O	DDOR, WK 31, 33, 35, MAPPING WK 33 - 34, DSS-43, 7 - 8 HRS	1 - 3
MERA	EDL TEST, WK 32, DSS-14/15/24/25/26, 4 HRS	2
	TCM, WK 31 (DOY 210)	3
MERB	TCM, WK 35 (DOY 238)	3
MEX	NAV CAMPAIGN, WK 33 - 35, 5 - 8 HRS	3 - 11
SOHO	TSO SUPPORT, DSS-14, WK 33, 4 HRS	5
ULYS	ROUTINE/DATATION, 5 - 12 HRS	4 - 5
VGR1	ROUTINE/NEGOTIATED SUPPORT, 2.5 - 8 HRS	4 - 8
	MAGROL WK 32 (DOY 221) DSS-14, 7 HRS	1

Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #07 - 70M
Late July - August (Weeks 30 - 35) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REDUCE DSS-14, 63 ROUTINE MAINTENANCE TO ONE 8-HR AND ONE 6-HR SUPPORT IN WK 30 AND 35 AND REDUCE DSS-14 IN WK 33 TO ONE 8-HR SUPPORT (GSSR, ULYS)
GBRA	REDUCE PLANET R/AST AND M-WAVE SPECT TO 4 HRS, REQUESTED VLBA AND RADIO STARS, AND REQUESTED HOST COUNTRY USING THREE 8-HR SUPPORTS (DSS, ULYS)
GSSR	REQUESTED ASTEROID 1994PM SUPPORT DELETE WK 32 MARS RADAR (MERA)
M01O	MSPA 1 - 2 MAPPING SUPPORTS WITH MGS USING DSS-25, 34, AND 63 (DSS-54 DOWNTIME PROPOSAL, MEX)
MERA	REQUESTED SUPPORT
MERB	REQUESTED SUPPORT
MEX	MOVE DSS-14 SUPPORT TO DSS-26 (MERB)
SOHO	DELETE WK 33 TSO (DSS-54 DOWNTIME PROPOSAL)
ULYS	MOVE TWO 10-HR PASSES TO DSS-63 (DSS, GSSR)
VGR1	DELETE DSS-63 PASSES IN WK 30 - 32 (USE 8-HRS PLANNED AT DSS-26) REDUCE WK 33 - 35 SUPPORT TO 4-HR PASSES AND MOVE TO DSS-34 (MERB, MEX, ULYS)



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #08 - 70M
Early September (Weeks 36 - 37)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	BEARING/ROUTINE, 6 - 10.5 HRS	5 - 6
GBRA	PLANET R/AST, DSS-14, M-WAVE SPECT, 9 HRS	4
	RA500 WCB, WK 36, DSS-14\63, 24 HRS	1
	VLBA WCB, WK 36, DSS-14\63	1
	RADIO STARS WCB, WK 37, DSS-14\63, 14 HRS	1
GPB	QUARTERLY EPOCH, WK 37, 6.5 - 12 HRS	3
GSSR	MARS RADAR, WK 36, DSS-14/25, 7 HRS	1
	MERCURY RADAR, DSS-14, 5.5 HRS	2 - 3
M01O	DDOR/MAPPING, WK 37, 7 - 8 HRS	9
MERA	MINIMUM CRUISE, DSS-43, VLBI, WK 37, DSS-15\43, 1 - 8 HRS	1 - 2
MERB	EDL TEST, WK 36, DSS-63/65/54/55, 4 HRS	2
NOZO	ROUTINE SUPPORT, WK 36, DSS-43	0 - 1
SOHO	TSO SUPPORT, WK 37, DSS-14, 4 HRS	5
SVLB	ROUTINE SUPPORT, WK 37	1
ULYS	ROUTINE SUPPORT, 5 - 12 HRS	3 - 4
VGR1	ROUTINE SUPPORT, DSS-14, 63	7
VGR2	NEGOTIATED, WK 36, DTR P/B, WK 37, DSS-43, 7-8 HRS	1 - 4

Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #08 - 70M
Early September (Weeks 36 - 37) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REDUCE DSS-14 ROUTINE MAINTENANCE TO ONE 8-HR SUPPORT (GSSR, SOHO, ULYS)
GBRA	REDUCE M-WAVE SPECT AND PLANET R/AST TO 4 HRS SPLIT RA500 INTO THREE 8-HR SUPPORTS AND MOVE TO WK 41 REDUCE RADIO STARS TO 8 HRS (DSS, M01O, MERB, ULYS)
GPB	MOVE SUPPORT TO WK 36 (M01O, MERA, VGR2, ULYS)
GSSR	REDUCE MARS AND MERCURY SUPPORTS TO 4 HRS (DSS, GBRA)
M01O	MOVE ONE DSS-43 SUPPORT TO THE 34HEF IN WK 37 (VGR2 DTR P/B)
MERA	REQUESTED SUPPORT USING DSS-15, 65 (M01O, VGR2)
MERB	REQUESTED SUPPORT
NOZO	REQUESTED SUPPORT
SOHO	MOVE TWO PASSES TO DSS-16, 27 (DSS, GSSR, ULYS)
SVLB	REDUCE SUPPORT TO 4 HRS (DSS, GSSR, GBRA)
ULYS	REQUESTED SUPPORT
VGR1	REDUCE TO 4-HR PASSES (DSS, SOHO, ULYS)
VGR2	REQUESTED SUPPORT

Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #09 - 70M
Mid-September - Mid-October (Weeks 38 - 42)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSN	VLBI ANTENNA CALIBRATION	1
DSS	BEARING/ROUTINE MAINTENANCE, 6 - 10.5 HRS	5 - 6
GBRA	PLANET R/AST, DSS-14, M-WAVE SPECT, 4 - 9 HRS	4
	HOST COUNTRY, WK 41, DSS-63, 24 HRS	1
	VLBA WCB, WK 40, DSS-14\63	1
GODR	ROUTINE SUPPORT, WK 38, 40, DSS-14/15	1
GSSR	ASTEROID 1999CU3, WK 38, 39, DSS-14, 12 HRS	3
	MERCURY, WK 38, DSS-14, 5.5 HRS	2
M01O	DELTA DOR/MAPPING, 7 - 8 HRS	8 - 14
/MGS	(INCLUDES 9 MSPA PASSES WITH MGS IN WK 41 - 42)	
MAP	MANEUVER SUPPORT, WK 38	3
MERA	MINIMUM CRUISE, WK 38	3
	BUSY CRUISE, CHECKOUT, WK 40 - 42, DSS-43	3 - 4
	EDL TEST, DSS-14/15/24/25/26, WK 42, 4 HRS	2
	VLBI SUPPORT, DSS-43, 1 HR	1 - 4
MERB	MINIMUM CRUISE, DSS-43, VLBI, DSS-15\43, 1 - 8 HRS	1 - 2



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #09 - 70M

Mid-September - Mid-October (Weeks 38 - 42) (Continued)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
NOZO	ROUTINE SUPPORT	0 - 1
SVLB	ROUTINE SUPPORT, WK 38, 39, 41, AND 42	1
ULYS	ROUTINE SUPPORT, 5 - 10 HRS	5
VGR1	MAGROL OVERLAY, WK 38, DSS-14, 7 HRS	1
VGR2	ASCAL (DOY 259) AND MAGROL (DOY 262) WK 38, ROUTINE SUPPORT, WK 41, DSS-43, 2 - 8 HRS	2 - 7



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #09 - 70M

Mid-September - Mid-October (Weeks 38 - 42) (Continued)



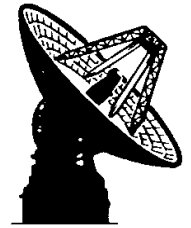
<u>USER</u>	<u>RECOMMENDATION</u>
DSN	REDUCE TO 4 HRS (DSS, GSSR, ULYS)
DSS	REDUCE ROUTINE MAINTENANCE TO ONE 8-HR SUPPORT PER ANTENNA IN WK 38, 39, 41 AND 42 (GBRA, GSSR, NOZO, ULYS, VGR1, VGR2)
GBRA	REDUCE M-WAVE SPECT AND PLANET R/AST TO 4 HRS IN WK 38 - 41, DELETE M-WAVE SPECT AND PLANET R/AST IN WK 42, REQUESTED VLBA SUPPORT, SPLIT HOST COUNTRY INTO THREE 8-HR SUPPORTS (DSS, GSSR, M01O/MGS, MERA, ULYS, VGR1, VGR2)
GODR	DELETE SUPPORT (DSS, GSSR AST 1999CU3)
GSSR	REQUESTED SUPPORT FOR ASTEROID 1999CU3 REDUCE MERCURY TO 4 HRS (DSS, GSSR AST 1999CU3)
M01O	REQUESTED MSPA AND STAND ALONE SUPPORT IN WK 40 AND 41 USING DSS-14, 63 (DSS, MERA, MERB, NOZO, VGR1)
/MGS	REQUESTED MSPA WITH M01O
MAP	MOVE MANEUVER TO WK 37
MERA	REDUCE ONE DSS-43 SUPPORT TO 4 HRS IN WK 38 (VGR2 ASCAL)



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #09 - 70M
Mid-September - Mid-October (Weeks 38 - 42) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
MERB	REQUESTED MINIMUM CRUISE SUPPORT USING DSS-15, 65 ON DOY 262 (VGR2 MAGROL)
NOZO	REQUESTED SUPPORT
SVLB	REDUCE SUPPORT TO 4 HRS (DSS, GBRA, GSSR)
ULYS	REQUESTED SUPPORT
VGR1	REQUESTED SUPPORT
VGR2	REQUESTED SUPPORT



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #10 - 70M
Late October - Mid-November (Weeks 43 - 46)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CNTR	ENCKE ENCOUNTER, WK 46	5
DSN	VLBI ANTENNA CALIBRATION, WK 45, 46	1
DSS	BEARING/ROUTINE/NEGOTIATED MAINTENANCE, 6 - 10.5 HRS	4 - 6
GBRA	PLANET R/AST, DSS-14, M-WAVE SPECT, 4 - 9 HRS RADIO STARS WCB, WK 44, DSS-14\63, 14 HRS VLBA WCB, WK 45, DSS-14\63	4 - 5 1 1
GODR	ROUTINE SUPPORT, WK 44, 46, DSS-14/15	1
GSSR	ASTEROID 1990OS, WK 45, 46, DSS-14 ASTEROID 1996GT, WK 46, DSS-14, 5 HRS	1 - 4 3
M01O	DELTA DOR AND MAPPING, 7 - 8 HRS	12 - 14
/MGS	(INCLUDES 9 - 10 MSPA PASSES WITH MGS)	
MERA	MINIMUM CRUISE, DSS-43, VLBI, WK 43, DSS-15\43, TCM, WK 45, 1 - 8 HRS	2 - 3



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #10 - 70M

Late October - Mid-November (Weeks 43 - 46) (Continued)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
MERB	CHECKOUT, VLBI (DSS-15\43) WK 43, 1 - 8 HRS	8 - 10
MEX	CAPTURE, WK 44 - 46, DSS-63, 9 - 10 HRS	3 - 4
SVLB	ROUTINE SUPPORT, WK 43, 45, AND 46	1
ULYS	ROUTINE SUPPORT, 5 - 10 HRS	3 - 4
VGR1	ROUTINE, DSS-43, DTR ARRAY WK 44 (DOY 302) DSS-14/15, WK 45, ASCAL (DOY 308) AND MAGROL (DOY 311) DSS-14, 2 - 7 HRS	4 - 6



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #10 - 70M

Late October - Mid-November (Weeks 43 - 46) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
CNTR	REQUESTED SUPPORT USING TWO 4-HR SPLIT PASSES AT DSS-43, 63 (DSS, M01O/MGS, MEX)
DSN	REDUCE TO 4 HR SUPPORTS (CNTR, DSS, M01O, MEX)
DSS	REDUCE DSS-14 AND 63 TO ONE 8-HR SUPPORT IN WK 45, AND REDUCE DSS-63 TO ONE 8-HR SUPPORT IN WK 46 (CNTR, M01O, MEX, VGR1)
GBRA	REQUESTED VLBA SUPPORT, REDUCE M-WAVE SPECT AND PLANET R/AST TO 4 HRS, REDUCE RADIO STARS TO 10 HRS AND MOVE TO WK 43 (DSS, GSSR, M01O/MGS, ULYS, VGR1)
GODR	REQUESTED SUPPORT
GSSR	REQUESTED SUPPORT
M01O	REQUESTED STAND ALONE AND MSPA SUPPORT WITH MGS
/MGS	REQUESTED MSPA SUPPORT WITH M01O
MERA	REDUCE 1 SUPPORT TO 5.5 HRS (VGR1 DTR P/B)
MERB	REQUESTED SUPPORT
MEX	REQUESTED SUPPORT



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #10 - 70M

Late October - Mid-November (Weeks 43 - 46) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
SVLB	REDUCE TO 4 HRS (CNTR, DSS, M01O/MGS)
ULYS	MOVE TWO 10-HR PASSES TO DSS-63 (VGR1)
VGR1	REQUESTED ROUTINE SUPPORT USING DSS-14, 43 USE DSS-14, 43 SPLIT PASS FOR MAGROL SUPPORT (M01O, MGS)

Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #11 - 70M
Mid-November - Early December (Weeks 47 - 49)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSN	VLBI ANTENNA CALIBRATION, WK 47 AND 49	1
DSS	BEARING/ROUTINE MAINTENANCE, 6 - 10.5 HRS	5 - 6
GBRA	PLANET R/AST, DSS-14, M-WAVE SPECT, 9 HRS	4
	VLBA WCB, WK 49, DSS-14\63	1
GODR	ROUTINE SUPPORT, WK 48, DSS-14/15	1
GSSR	ASTEROID 1996GT, WK 47, DSS-14	1
M01O	MAPPING, 7 HRS	14
/MGS	(INCLUDES 9 - 10 MSPA PASSES WITH MGS)	
MERA	APPROACH, VLBI, 8 - 9 HRS	1 - 2
MERB	EDL TEST (DOY 323 AND 324) WK 47, DSS-63/65/54/55, VLBI, TCM (DOY 329) WK 48, 1 - 8 HRS	1 - 5
MEX	CAPTURE, DSS-63, 9 - 10 HRS	3 - 4
NOZO	ROUTINE SUPPORT, DSS-43	1
SVLB	ROUTINE SUPPORT, WK 47	1
ULYS	ROUTINE SUPPORT, 5 - 10 HRS	7
VGR1	NEGOTIATED SUPPORT, DSS-43, 4 HRS	1 - 3

Resource Allocation Review Requirements Analysis and Recommendations

2003 - Contention Period #11 - 70M

Mid-November - Early December (Weeks 47 - 49) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
DSN	REDUCE TO 4 HRS (DSS, GBRA, GSSR, SVLB)
DSS	REDUCE ROUTINE MAINTENANCE TO ONE 8-HR SUPPORT PER ANTENNA (M01O/MGS, MEX, ULYS)
GBRA	REDUCE M-WAVE SPECT AND PLANET R/AST TO 4 HRS REQUESTED VLBA SUPPORT (DSS, GSSR, M01O/MGS, MEX, SVLB, ULYS)
GODR	REDUCE TO 6 HR SUPPORTS (DSS, GBRA, M01O/MGS, MEX, SVLB, ULYS)
GSSR	REQUESTED SUPPORT
M01O	REDUCE MSPA PASSES TO 8 PASSES/WK, 8 - 10 HRS USE DSS-14, 43 IN WK 47 AND 48 FOR STAND ALONE PASSES (MERA, MERB, MEX)
/MGS	REDUCE MSPA PASSES TO 8 PASSES/WK, 8 - 10 HRS (MERA, MERB, MEX)
MERA	REQUESTED SUPPORT
MERB	REQUESTED SUPPORT
MEX	REDUCE TO 8 HRS AND USE TWO SPLIT PASSES AT DSS-63, 65 (DSS, M01O/MGS, MERA)



Resource Allocation Review Requirements Analysis and Recommendations

2003 - Contention Period #11 - 70M

Mid-November - Early December (Weeks 47 - 49) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
NOZO	REDUCE TO 6 HRS (M01O)
SVLB	REDUCE TO 6 HR SUPPORTS (DSN, DSS, GBRA, GSSR)
ULYS	REQUESTED SUPPORT IN WK 47 AND 49, IN WK 48, USE FOUR 10-HR PASSES AT DSS-63, 54, TWO 10-HR PASSES AT DSS-14, 24, AND 1 SPLIT PASS AT DSS-34, 54 (DSS, GBRA, VGR1)
VGR1	REQUESTED SUPPORT

Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #12 - 70M
December (Weeks 50 - 52)

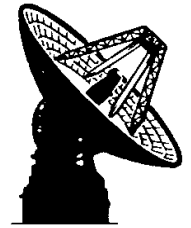


<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSN	VLBI ANTENNA CALIBRATION, WK 50, 51	1
DSS	BEARING/ROUTINE MAINTENANCE, 6 - 10.5 HRS	6
GBRA	PLANET R/AST, DSS-14, M-WAVE SPECT, 9 HRS	4
	RADIO STARS WCB, WK 50, DSS-14\63, 14 HRS	1
GODR	ROUTINE SUPPORT, WK 50 AND 52, DSS-14/15	1
GPB	QUARTERLY EPOCH, WK 51, 6.5 - 12 HRS	3
GSSR	MERCURY RADAR, WK 52, DSS-14, 5.5 HRS	2
M01O	MAPPING, 7 HRS	14
/MGS	(INCLUDES 9 MSPA PASSES WITH MGS IN WK 50, 52)	
MAP	ROUTINE SUPPORT, 45 MIN	7
MERA	APPROACH AND VLBI, TCM (DOY 361) 8 - 9 HRS	3 - 12
MERB	APPROACH AND VLBI, 1 - 9 HRS	2
MEX	CAPTURE AND MOI (DOY 360) DSS-63, 9 - 10 HRS	3 - 4
NOZO	ROUTINE SUPPORT, DSS-43	1
SRTF	ROUTINE SUPPORT, WK 51 AND 52, 1 HR	7
SVLB	ROUTINE SUPPORT	1
ULYS	ROUTINE SUPPORT, 5 - 10 HRS	7
VGR1	NEGOTIATED SUPPORT, DSS-43, 4 HRS	3 - 4
VGR2	MAGROL SUPPORT (DOY 353) DSS-43, 7 HRS	1

Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #12 - 70M
December (Weeks 50 - 52) (Continued)

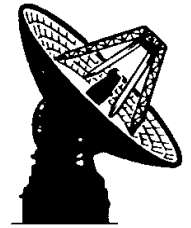


<u>USER</u>	<u>RECOMMENDATION</u>
DSN	REDUCE TO 4 HRS (DSS, GBRA, GPB, GSSR, MAP, SRTF, SVLB)
DSS	REDUCE ROUTINE MAINTENANCE TO ONE 8-HR SUPPORT PER ANTENNA (GPB, M01O/MGS, MERA, MERB, MEX, SRTF, ULYS, VGR2)
GBRA	REDUCE M-WAVE SPECT AND PLANET R/AST TO 4 HRS AND REDUCE RADIO STARS, TO 10-HRS (DSS, GBRA, GSSR, MAP, MEX, SRTF, SVLB, ULYS)
GODR	REDUCE TO 4 HRS IN WK 50 AND DELETE WK 52 SUPPORT (DSS, GBRA, M01O/MGS, MERA, SRTF, ULYS)
GPB	REQUESTED SUPPORT
GSSR	DELETE MERCURY SUPPORT IN WK 52 (DSS, GBRA, MERA, SRTF, ULYS)
M01O	REQUESTED SUPPORT
/MGS	REQUESTED SUPPORT
MAP	REQUESTED SUPPORT

Resource Allocation Review

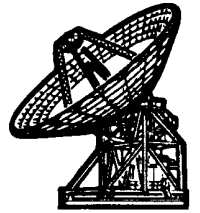
Requirements Analysis and Recommendations

2003 - Contention Period #12 - 70M
December (Weeks 50 - 52) (Continued)

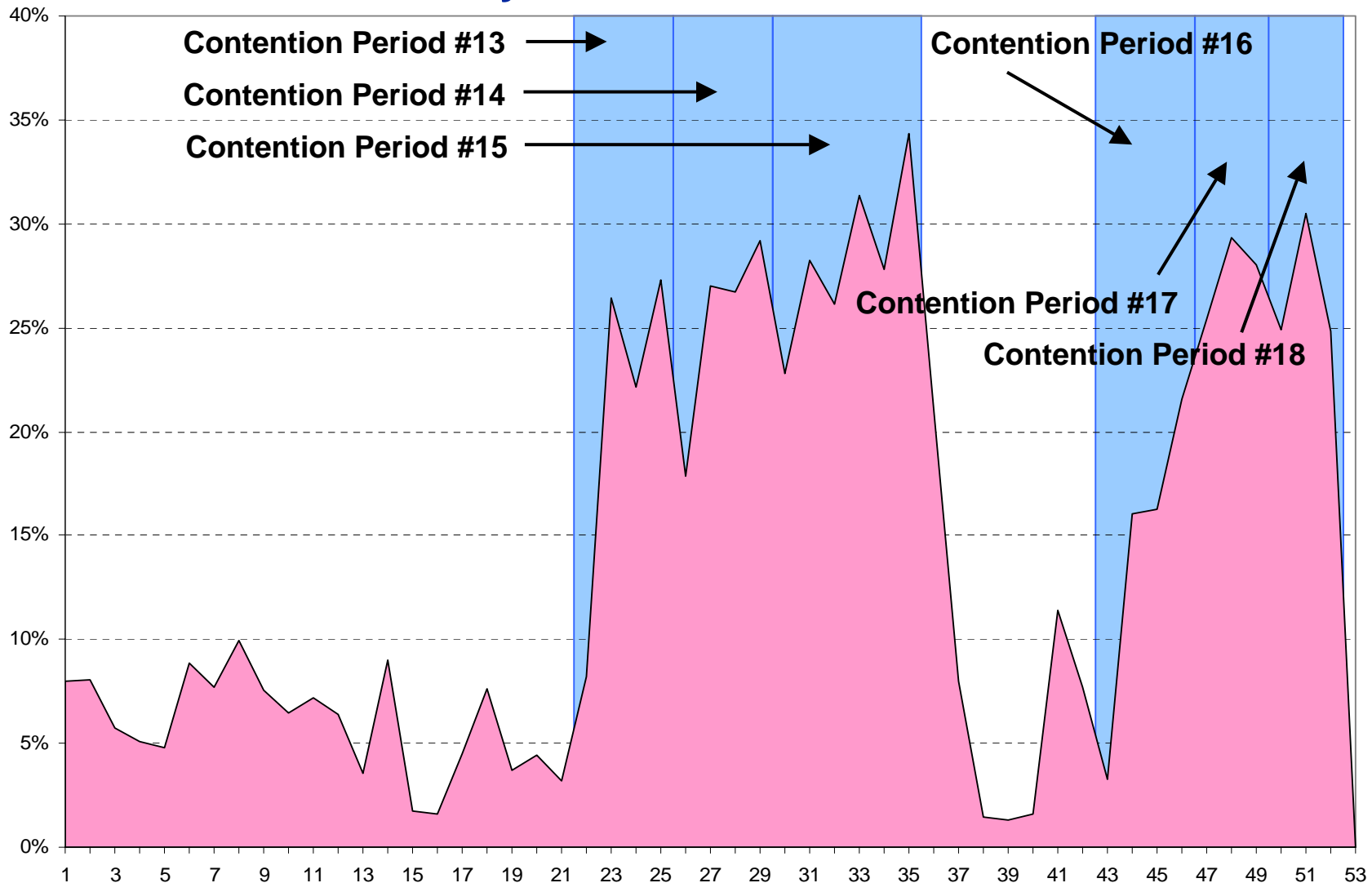


<u>USER</u>	<u>RECOMMENDATION</u>
MERA	REQUESTED APPROACH AND VLBI SUPPORT USING 34HEF, USE DSS-14, 45, 65 FOR TCM (M01O, MERB, MEX, NOZO, SRTF, VGR2)
MERB	REQUESTED SUPPORT IN WK 52 USING 34BWG1 (M01O, MAP, MERA, NOZO, SRTF)
MEX	REQUESTED SUPPORT FOR MOI ON DOY 360 MOVE REMAINING 3 PASSES TO DSS-54, 55 (M01O/MGS, MERA, MERB, SRTF)
NOZO	REQUESTED SUPPORT
SRTF	REQUESTED SUPPORT
SVLB	REDUCE SUPPORT TO 4 HRS (DSS, GBRA, GPB, GSSR, M01O/MGS, MAP, MEX, SRTF, ULYS, VGR2)
ULYS	REQUESTED SUPPORT
VGR2	REQUESTED SUPPORT

Resource Allocation Review Requirements Analysis and Recommendations



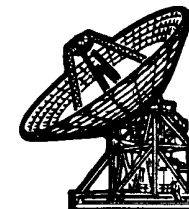
2003 Weekly Contention Percent - 34HEF



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #13 - 34HEF
Late May - Mid-June (Weeks 22 - 25)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CAS	ROUTINE, WK 22 - 24, DSS-45, 9 HRS	0 - 1
	CONJUNCTION, WK 25, DSS-45, 65, 5 - 8 HRS	14
MERA	LAUNCH (DOY 150) AND CHECKOUT	9 - 21
	VLBI, WK 25, DSS-15\45, 15\65, 1 HR	1
MGS	MAPPING/BETA SUPPORT, 12 HRS	9 - 10

<u>USER</u>	<u>RECOMMENDATION</u>
CAS	CHANGE CONJUNCTION SUPPORT USING 5-HR PASSES AT DSS-45 AND 8-HR PASSES AT DSS-65 (MERA)
MERA	REQUESTED SUPPORT
MGS	REDUCE TO 7-HR PASSES AND MSPA WITH M01O (AT DSS-25, 34, 54) FIVE PASSES IN WK 22 AND 9 - 10 PASSES IN WK 23 - 25 (MERA)



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #14 - 34HEF
Late June - Mid-July (Weeks 26 - 29)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CAS	CONJUNCTION, DSS-45, 65, 5 - 8 HRS	4 - 14
CNTR	EARTH GRAVITY ASSIST, WK 28 - 29	3 - 4
GODR	ROUTINE SUPPORT, WK 27, DSS-14/15	1
MERA	VLBI, DSS-15\45, 15\65, 1 HR	1 - 5
MERB	LAUNCH (DOY 178) TCM	9 - 21
	VLBI, WK 29, DSS-15\45, 15\65, 1 HR	1
MGS	MAPPING/BETA SUPPORT, 12 HRS	9 - 10
ULYS	ROUTINE SUPPORT, DSS-65, 6 HRS	0 - 1

Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #14 - 34HEF
Late June - Mid-July (Weeks 26 - 29) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
CAS	STARTING DOY 178 CHANGE CONJUNCTION SUPPORT USING 5-HR PASSES AT DSS-45 AND 8-HR PASSES AT DSS-65, TAKING GAPS OF 1 TO 2.5-HR DAILY (MERB)
CNTR	REQUESTED SUPPORT USING 7.5 HRS AT DSS-15 (VIEW PERIOD CONSTRAINT) OR SPLIT INTO 4-HR PASSES USING DSS-15, 45 FOR 8 HRS OF CONTIGUOUS TRACKING (CAS)
GODR	REDUCE TO 6 HRS (CAS, MERB)
MERA	DELETE VLBI ON THE 34HEF AND USE 1 HR OF OVERLAP BETWEEN BUSY CRUISE AND CHECKOUT PASSES ON THE 70M (MERB, MGS)
MERB	DELETE VLBI PASS AND USE 1 HR OF OVERLAP BETWEEN LAUNCH SUPPORT PASSES IN WK 29 (MERA)
MGS	STARTING DOY 178 REDUCE TO 7-HR PASSES AND MSPA WITH M01O AT DSS-25, 34, 54 (MERB)
ULYS	REQUESTED SUPPORT USING DSS-63 (CAS)



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #15 - 34HEF
Late July - August (Weeks 30 - 35)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CAS	ROUTINE SUPPORT, DSS-45, 9 HRS	0 - 1
CLU4	ROUTINE SUPPORT, DSS-15, 45, 2 HRS	2
CNTR	EARTH GRAVITY ASSIST	3 - 7
DSN	CAT M&E, WK 31, 32, 35, DSS-15\45, 15\65, 24 HRS	1
	CLOCK SYNC, WK 30, 32, 34, DSS-15\65, 4 HRS	1
DSS	MAINTENANCE, 6 - 8 HRS	3
GBRA	HOST COUNTRY, WK 32, DSS-45, 12 HRS	1
M01O	MAPPING, WK 32 - 35, DSS-45, 65, 7 HRS	1 - 5
MERA	EDL TEST, WK 32, DSS-14/15/24/25/26, 4 HRS	2
	TCM, CHECKOUT, BUSY AND MINIMUM CRUISE	3 -14
	VLBI, DSS-15\45, 15\65, 1 HR	1
MERB	TCM, CHECKOUT, BUSY CRUISE	7 - 16
	VLBI, DSS-15\45, 15\65, 1 HR	1 - 5
MGS	MAPPING/BETA SUPPORT, 12 HRS	9 - 10
SGP	CRUSTAL DYN, WK 31, 33, 34, 18 - 24 HRS	1 - 2
VGR1	ROUTINE, WK 31, 32, 35, DSS-15, 65, 4 - 8 HRS	3 - 7
VGR2	NEGOTIATED SUPPORT, WK 31, DSS-45	3 - 4

Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #15 - 34HEF
Late July - August (Weeks 30 - 35) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
CAS	REQUESTED SUPPORT
CLU4	REQUESTED SUPPORT USING DSS-16, 27, 46 (34M USERS)
CNTR	REQUESTED SUPPORT
DSN	SPLIT CAT M&E INTO THREE 8-HR SUPPORTS (34HEF USERS)
DSS	REDUCE DSS-15 SUPPORT TO 6 HRS (CAS, M01O, MERA, MERB)
GBRA	DELETE SUPPORT (34M USERS)
M01O	MSPA WITH MGS AND IN WK 35 REDUCE TO 8 PASSES/WK (CNTR, MERA, MERB)
MERA	REQUESTED SUPPORT
MERB	DELETE VLBI SUPPORT IN WK 30, 33 - 35 AND USE 1 HR OVERLAP BETWEEN CHECKOUT AND TCM PASSES (M01O, MERA, MGS)
MGS	REDUCE TO 7-HR PASSES, IN WK 35 REDUCE TO 8 PASSES/WK, MOVE ALL SUPPORT TO DSS-25, 34, 63, AND MSPA WITH M01O (CNTR, MERA, MERB)
SGP	DELETE SUPPORT (34M USERS)
VGR1	DELETE SUPPORT IN WK 31, 32 (8 HRS PLANNED AT DSS-26) IN WK 35 REDUCE TO 4-HR PASSES AND MOVE TO DSS-34 (34M USERS)
VGR2	REQUESTED SUPPORT USING DSS-43 (MERA, MERB)



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #16 - 34HEF
Late October - Mid-November (Weeks 43 - 46)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CNTR	ENCKE ENCOUNTER	7 - 21
DSS	ROUTINE AND NEGOTIATED MAINTENANCE, 4 - 8 HRS	3
MERA	MINIMUM CRUISE, VLBI, TCM (WK 45) 1 - 8 HRS	3 - 12
MERB	CHECKOUT, MINIMUM CRUISE, VLBI, 1 - 8 HRS	1 - 10
MEX	CAPTURE, DSS-65, 9.9 HRS	3 - 4
SDU	P/WILD 2, TCM, 4 - 8 HRS	1 - 4
SGP	CRUSTAL DYN M4, WK 44, 45, 24 HRS	1 - 2
ULYS	ROUTINE D/L SUPPORT, DSS-65, 5 HRS	0 - 1
VGR1	NEGOTIATED D/L SUPPORT, WK 43, DSS-65, 4 HRS	3 - 4
	D/L DTR ARRAY P/B, WK 44, DSS-14/15, 7.4 HRS	1

Note: DSS-45 is down for antenna controller replacement through WK 43, DOY 298/2200 UTC.



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #16 - 34HEF

Late October - Mid-November (Weeks 43 - 46) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
CNTR	REQUESTED SUPPORT
DSS	REQUESTED AND NEGOTIATED SUPPORT
MERA	MOVE WK 44 AND 46 SUPPORT TO DSS-25, 55 AND 34BWG1 (CNTR, VGR1 DTR)
MERB	MOVE 2 SUPPORTS IN WK 44 TO DSS-54, 55, AND MOVE WK 45 AND 46 SUPPORT TO 34BWG2 (CNTR ENC, MERA TCM)
MEX	MOVE 4 PASSES TO DSS-54 AND 55 (CNTR ENC, MERA TCM)
SDU	REQUESTED SUPPORT
SGP	DELETE SUPPORT (DSS, CNTR, MERA, MERB, MEX, SDU, ULYS, VGR1)
ULYS	REQUESTED SUPPORT
VGR1	REQUESTED DTR ARRAY, MOVE D/L SUPPORT TO DSS-55 (CNTR, MERA, MERB, SDU)

Note: DSS-45 is down for antenna controller replacement through WK 43, DOY 298/2200 UTC.



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #17 - 34HEF
Mid-November - Early December (Weeks 47 - 49)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CNTR	ENCKE ENCOUNTER	3 - 7
DSN	CAT M&E VLBI, WK 47, 48, DSS-15\65, 15\45	1
DSS	ROUTINE AND NEGOTIATED MAINTENANCE, 4- 8 HRS	3
GBRA	HOST COUNTRY, WK 47, DSS-45, 12 HRS	1
GODR	ROUTINE SUPPORT, WK 48, DSS-14/15	1
MERA	APPROACH, VLBI, MINIMUM CRUISE, 1 - 9 HRS	15 - 21
MERB	EDL TEST, DSS-63/65/54/55, CHECKOUT, BUSY CRUISE, VLBI, 70M/34H, TCM, 1 - 9 HRS	10 - 16
MEX	CAPTURE, DSS-65, 9.9 HRS	3 - 4
SDU	P/WILD 2 AND TCM, 4 - 8 HRS	12 - 16
SGP	CRUSTAL DYN M4, WK 47, 49, DSS- 45, 65, 24 HRS	1
ULYS	ROUTINE D/L, DSS-65, 5 HRS	0 - 1

Resource Allocation Review Requirements Analysis and Recommendations

2003 - Contention Period #17 - 34HEF

Mid-November - Early December (Weeks 47 - 49) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
CNTR	USE TWO 4-HR SPLIT PASSES AT DSS-45 AND 65 (MERA, MERB)
DSN	DELETE CAT M&E VLBI (CNTR, DSS, MERA, MERB, SDU)
DSS	REQUESTED AND NEGOTIATED SUPPORT
GBRA	DELETE SUPPORT (CNTR, DSS, MERA, MERB, SDU)
GODR	REDUCE SUPPORT TO 6 HRS (DSS, CNTR, MERB, SDU)
MERA	USE DSS-34 AND 34BWG2 FOR APPROACH, MINIMUM CRUISE (CNTR, MERB)
MERB	DELETE 1 HR VLBI AND USE 1 HR OVERLAP DURING CHECKOUT AND BUSY CRUISE PASSES (CNTR, MERA)
MEX	MOVE SUPPORT TO DSS-55 (CNTR, MERA, MERB)
SDU	REQUESTED SUPPORT
SGP	DELETE SUPPORT (CNTR, DSS, MERA, MERB, SDU)
ULYS	REQUESTED SUPPORT USING DSS-54 (CNTR, SDU)



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #18 - 34HEF
December (Weeks 50 - 52)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CAS	GRAVITATIONAL WAVE, WK 51, 52, DSS-45, 65	14
CLU2II	ARRAY P/B SUPPORT, WK 52, DSS-16/24/27/15, 1 HR	1
CLU4	ROUTINE D/L P/B, DSS-15, 45, 2 HRS	2
DSS	ROUTINE AND NEGOTIATED MAINT, 4 - 8 HRS	3
GBRA	HOST COUNTRY, WK 52, DSS-45, 12 HRS	1
GODR	ROUTINE SUPPORT, WK 50, DSS-14/15, 52	1
MERA	APPROACH AND APPROACH/VLBI, 8 - 9 HRS	8 - 17
MERB	APPROACH, VLBI, BUSY CRUISE, 1 - 9 HRS	15 - 17
MEX	CAPTURE (MOI DOY 360) DSS-65, 9.9 HRS	3 - 4
SDU	P/WILD 2, TCM, 4 - 8 HRS	16
SGP	CRUSTAL DYN M4, WK 50, DSS-45, 24 HRS	1
ULYS	ROUTINE D/L SUPPORT, DSS-65, 5 HRS	0 - 1

Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #18 - 34HEF
December (Weeks 50 - 52) (Continued)



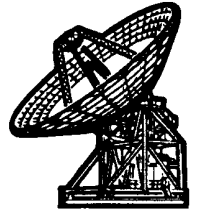
<u>USER</u>	<u>RECOMMENDATION</u>
CAS	USE FULL VIEW AT DSS-25, REDUCE DSS-45 SUPPORT TO 5 HRS AND FOR MADRID SUPPORT, USE 7 SPLIT PASSES, 4 HRS EACH AT DSS-65 AND DSS-54 (MERA, MERB)
CLU2II	REQUESTED SUPPORT USING DSS-27 (DSS, CAS, MERA, MERB, SDU, ULYS)
CLU4	REQUESTED SUPPORT USING DSS-27, 46 (DSS, CAS, MERA, MERB, SDU, ULYS)
DSS	REQUESTED SUPPORT
GBRA	DELETE SUPPORT (DSS, CAS, MERA, MERB, SDU, ULYS)
GODR	REDUCE SUPPORT TO 4 HRS IN WK 51 AND DELETE SUPPORT IN WK 52 (DSS, CAS, MERA, MERB, SDU, ULYS)
MERA	REQUESTED SUPPORT IN WK 50, 51 AND IN WK 52 MOVE TO 70M (CAS, MERB)



Resource Allocation Review

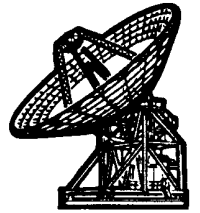
Requirements Analysis and Recommendations

2003 - Contention Period #18 - 34HEF
December (Weeks 50 - 52) (Continued)

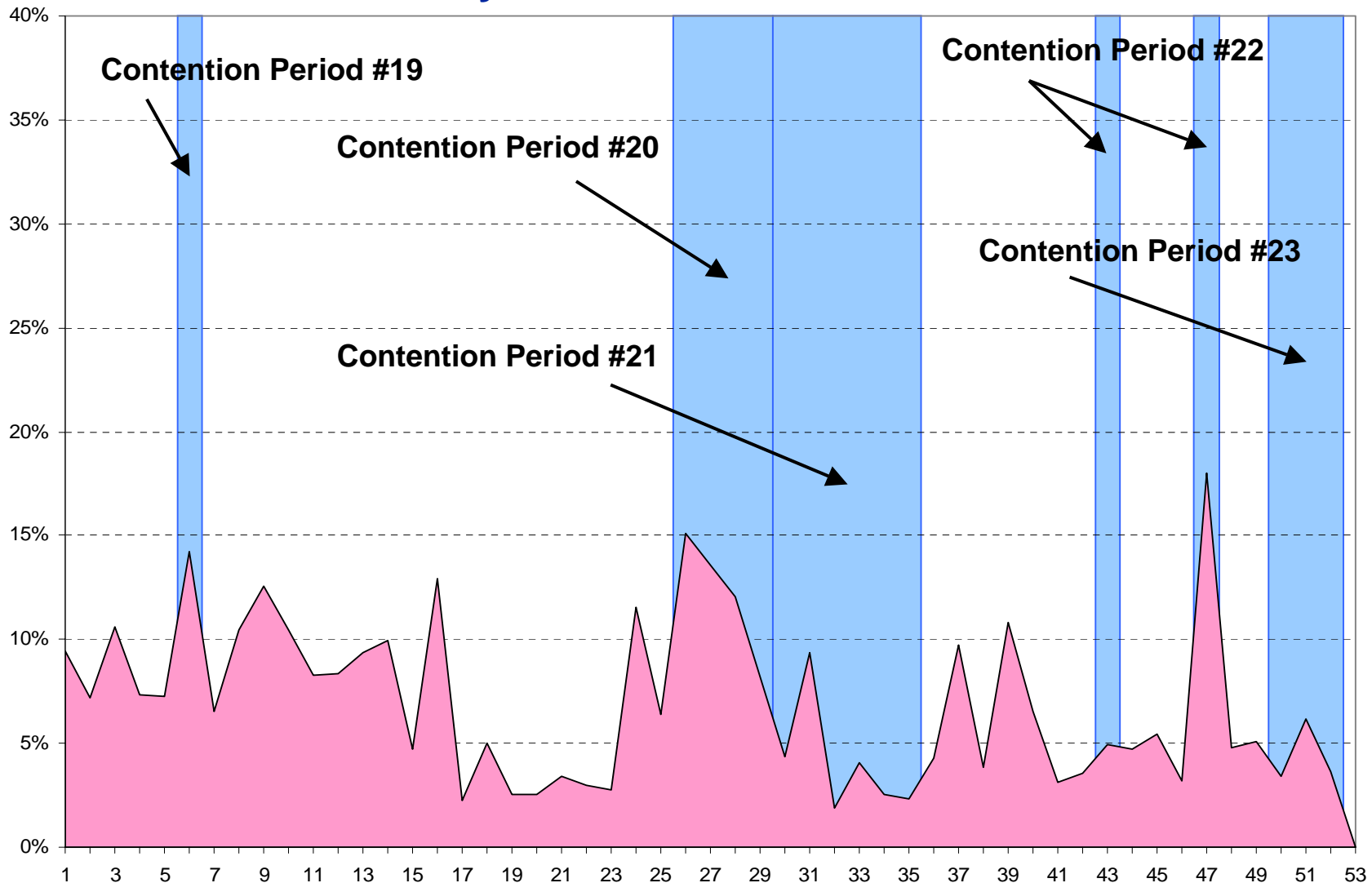


<u>USER</u>	<u>RECOMMENDATION</u>
MERB	MOVE 8 - 12 PASSES TO 70M AND MOVE 3 - 4 PASSES TO 34BWG1 IN WK 50, 51, USE 1 HR OVERLAP BETWEEN PASSES FOR VLBI AND DELETE 34HEF VLBI, REQUESTED SUPPORT IN WK 52, (CAS, MERA)
MEX	MOVE SUPPORT TO DSS-54, 55 (CAS, MERA, MERB)
SDU	REQUESTED SUPPORT
SGP	DELETE SUPPORT (DSS, CAS, MERA, MERB, SDU, ULYS)
ULYS	REQUESTED SUPPORT

Resource Allocation Review Requirements Analysis and Recommendations



2003 Weekly Contention Percent - 34BWG1





Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #19 - 34BWG1
Early February (Week 6)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CHDR	ROUTINE SUPPORT, 1 HR	21
CLU4	ROUTINE SUPPORT, DSS-24, 2 HRS	1
DSS	ROUTINE MAINTENANCE, 4 - 8 HRS	3
GNS	ROUTINE/MANEUVER SUPPORT	11
M01O	MAPPING SUPPORT, DSS-34, 7 HRS	3 - 4
NOZO	ROUTINE SUPPORT, DSS-24, 54	0 - 1
ROSE	LAUNCH SUPPORT, DSS-54	7
ULYS	ROUTINE SUPPORT, DSS-54, 10 HRS	0 - 1
	ROUTINE SUPPORT, DSS-24, 10 HRS	2
	ROUTINE SUPPORT, DSS-54, 6 HRS	2
	ROUTINE SUPPORT, DSS-34, 4 HRS	2



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #19 - 34BWG1
Early February (Week 6) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
CHDR	MOVE 7 PASSES TO DSS-16, 46 (GNS)
CLU4	REQUESTED SUPPORT USING DSS-15, 45 (GNS)
DSS	MOVE DSS-24 MAINTENANCE DAY TO TUESDAY (GNS)
GNS	REQUESTED SUPPORT
M01O	REQUESTED SUPPORT USING DSS-25, 34, 65 (GNS)
NOZO	REQUESTED SUPPORT
ROSE	REQUESTED SUPPORT
ULYS	ALLOCATE TWO SPLIT PASSES USING 4 HRS AT DSS-45 AND 6 HRS AT DSS-54, ONE 10-HR PASS USING DSS-63, FOUR 10-HR PASSES AT DSS-14 (DSS, GNS, ROSE)



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #20 - 34BWG1
Late June - Mid-July (Weeks 26 - 29)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
ACE	ROUTINE SUPPORT, WK 27, DSS-24, 54, 10 HRS	1
DSS	MAINTENANCE, 6 - 8 HRS	3
GNS	ROUTINE SUPPORT, 4 HRS	3
M01O	DDOR, WK 29, AND MAPPING, DSS-34, 54, 7 HRS	8 - 11
MEX	TCM (DOY 193, 200) WK 28, 29, DSS-54, 12 HRS	1
NOZO	ROUTINE SUPPORT	1 - 9
SDU	TCM, TCM DAY(DOY 190) DSS-34, 54, 4 - 8 HRS	9 - 10
ULYS	ROUTINE SUPPORT, 5 - 10 HRS	3 - 5
VGR1	NEGOTIATED SUPPORT, 4 HRS	7
VGR2	NEGOTIATED SUPPORT, DSS-34	2 - 4
WIND	ROUTINE SUPPORT, 2.5 HRS	7

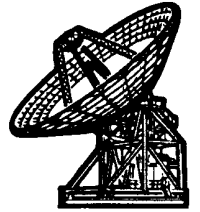


Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #20 - 34BWG1

Late June - Mid-July (Weeks 26 - 29) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
ACE	REQUESTED SUPPORT USING THE 26M (DSS, M01O, NOZO, SDU)
DSS	REDUCE MAINTENANCE BY 2 HRS AT EACH ANTENNA (GNS, SDU, ULYS)
GNS	REQUESTED SUPPORT
M01O	REQUESTED SUPPORT
MEX	REDUCE TO 10-HR AVAILABLE VIEW PERIOD (M01O, NOZO)
NOZO	REQUESTED SUPPORT
SDU	REQUESTED SUPPORT
ULYS	REQUESTED SUPPORT
VGR1	DELETE SUPPORT (M01O, NOZO, ULYS, VGR2, WIND)
VGR2	REQUESTED SUPPORT
WIND	REQUESTED SUPPORT



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #21 - 34BWG1
Late July - August (Weeks 30 - 35)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u> (DOY 202 - 243)
DSS	DSS-54 20KW TRANSMITTER INSTALLATION MAINTENANCE, 6 - 8 HRS	3
CHDR	ROUTINE SUPPORT, 1 HR	21
CLU1	ROUTINE SUPPORT, DSS-24, 34, 2 HRS	2
CLU2	ROUTINE SUPPORT, DSS-24, 34, 2 HRS	2
CLU4	ROUTINE SUPPORT, DSS-24, 2 HRS	1
GNS	MANEUVER, WK 31, ROUTINE, 4 - 8 HRS	3 - 11
IMAG	ROUTINE SUPPORT, 50 MIN - 1.5 HRS	14
INTG	ROUTINE SUPPORT, WK 33, DSS-24, 7 HRS	3
M010	DDOR, WK 33, MAPPING, DSS-34, 54, 7 HRS	6 - 10
MERA	EDL TEST, WK 32, DSS-14/15/24/25/26, 4 HRS	2
MEX	TCM (DOY 207-208) DSS-54, 12 HRS	1
NOZO	TCM AND ROUTINE, DSS-24, 54	1 - 4
SRTF	ROUTINE SUPPORT, DSS-34, 54, 1 HR	9 - 10
ULYS	DATATION, WK 35, ROUTINE, DSS-54, 6 - 10 HRS	3 - 6
VGR2	NEGOTIATED SUPPORT, WK 32 - 35	3 - 4
WIND	TCM, WK 33, DSS-24\54, ROUTINE, 2.5 - 3 HRS	7 - 8

Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #21 - 34BWG1
Late July - August (Weeks 30 - 35) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REQUESTED DOWNTIME (DELETE DSS-54 MAINTENANCE)
CHDR	MOVE 14 PASSES TO THE 26M (34M USERS)
CLU1	REQUESTED SUPPORT USING DSS-16, 27, 46 (34M USERS)
CLU2	REQUESTED SUPPORT USING DSS-16, 27, 46 (34M USERS)
CLU4	REQUESTED SUPPORT USING DSS-16, 27 (34M USERS)
GNS	USE DSS-24, 34 FOR ROUTINE SUPPORT AND DSS-24, 34, 66 FOR MANEUVER IN WK 31 (DSS)
IMAG	REQUESTED SUPPORT USING 26M AND DSS-27 (34M USERS)
INTG	REQUESTED SUPPORT USING DSS-16 (34M USERS)
M01O	MSPA WITH MGS IN WK 35 REDUCE TO 8 PASSES/WK, MOVE SUPPORT TO DSS-25, 34, 63 (DSS)
MERA	REQUESTED ARRAY SUPPORT
MEX	REDUCE TO 10 HRS (VP CONSTRAINT) AND USE DSS-26 (DSS)
NOZO	USE DSS-24, 63 FOR TCM AND DSS-24 FOR ROUTINE (DSS)
SRTF	REQUESTED SUPPORT USING DSS-34, 65 (DSS)
ULYS	REQUESTED ROUTINE SUPPORT USING DSS-65, 63 MOVE DATATION TEST TO WK 44 (DSS)
WIND	MOVE TCM AFTER WK 35 AND USE DSS-24, 34 FOR ROUTINE SUPPORT (DSS)



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #22 - 34BWG1
Late October - Mid-November (Weeks 43, 47)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	ROUTINE MAINTENANCE, 6 - 8 HRS	3
GNS	ROUTINE AND MANEUVER (WK 47) 4 - 8 HRS	3 - 11
MERB	EDL TEST, WK 47, DSS-54, 4 HRS	2
NOZO	ROUTINE, TCM, AND APPROACH	2 - 3
ULYS	ROUTINE SUPPORT, 5 - 10 HRS	2 - 4
VGR2	ROUTINE SUPPORT, DSS-34	2 - 7
WIND	TCM, WK 43, 47, ROUTINE SUPPORT, 2.5 - 3 HRS	7 - 8

Note: DSS-45 is down for antenna controller replacement through WK 43, DOY 298/2200 UTC.



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #22 - 34BWG1

Late October - Mid-November (Weeks 43, 47) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
DSS	DELETE DSS-24 MAINTENANCE, WK 47 (GNS)
GNS	REQUESTED SUPPORT
MERB	REQUESTED SUPPORT
NOZO	REDUCE 3 PASSES IN WK 47 TO 5 HRS (GNS, MERB)
ULYS	USE SPLIT PASSES IN WK 47, 5 HRS EACH AT DSS-24, 54 (GNS)
VGR2	MOVE 2 PASSES TO DSS-43 IN WK 43 AND USE 3 - 4 SPLIT PASSES, 4 HRS EACH AT DSS-43 AND DSS-45 IN WK 47 (WIND, GNS)
WIND	REQUESTED SUPPORT

Note: DSS-45 is down for antenna controller replacement through WK 43, DOY 298/2200 UTC.

Resource Allocation Review

Requirements Analysis and Recommendations

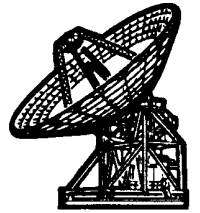
2003 - Contention Period #23 - DSS-34
December (Weeks 50 - 52)



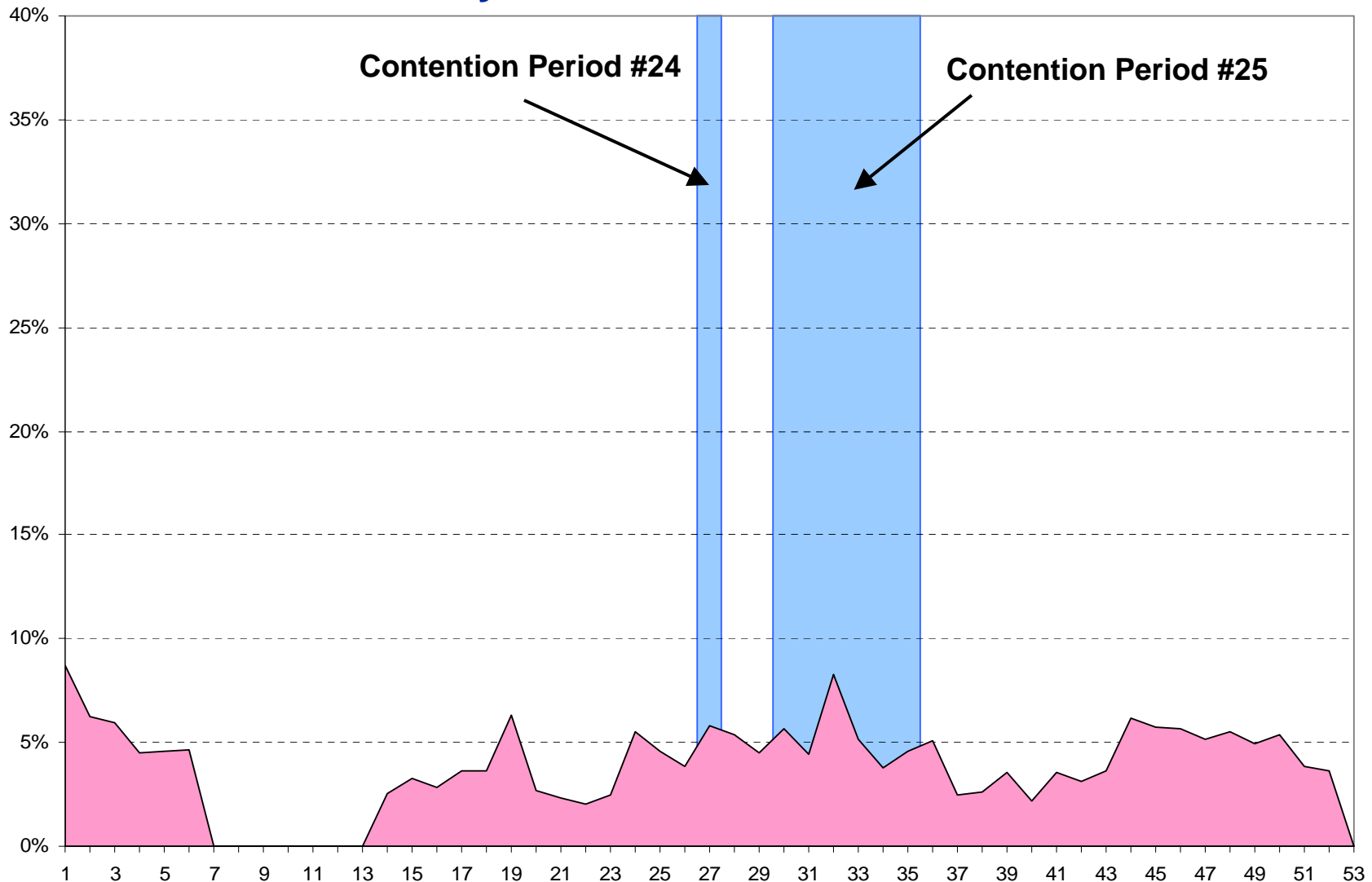
<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	ROUTINE MAINTENANCE, 6 HRS	1
MGS	TCM SUPPORT, WK 51	3 - 4
NOZO	ROUTINE SUPPORT	1
ULYS	ROUTINE SUPPORT, 5 HRS	1
VGR2	NEGOTIATED SUPPORT	7

<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REQUESTED SUPPORT
MGS	REDUCE 2 PASSES TO 6 HRS (DSS, NOZO, VGR2)
NOZO	REQUESTED SUPPORT
ULYS	REQUESTED SUPPORT
VGR2	REDUCE NEGOTIATED SUPPORT TO 5 HRS (DSS, MGS, NOZO, ULYS)

Resource Allocation Review Requirements Analysis and Recommendations



2003 Weekly Contention Percent - 34BWG2





Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #24 - DSS-25

Early July (Week 27)



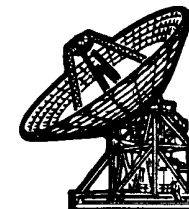
<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CAS	CONJUNCTION	7
DSS	MAINTENANCE, 6 HRS	1

<u>USER</u>	<u>RECOMMENDATION</u>
CAS	REQUESTED SUPPORT
DSS	REDUCE MAINTENANCE TO 4 HRS OR MOVE OFF SHIFT (CAS)

Resource Allocation Review

Requirements Analysis and Recommendations

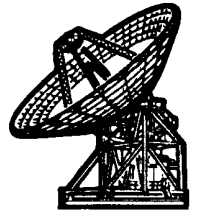
2003 - Contention Period #25 - 34BWG2
Late July - August (Weeks 30 - 35)



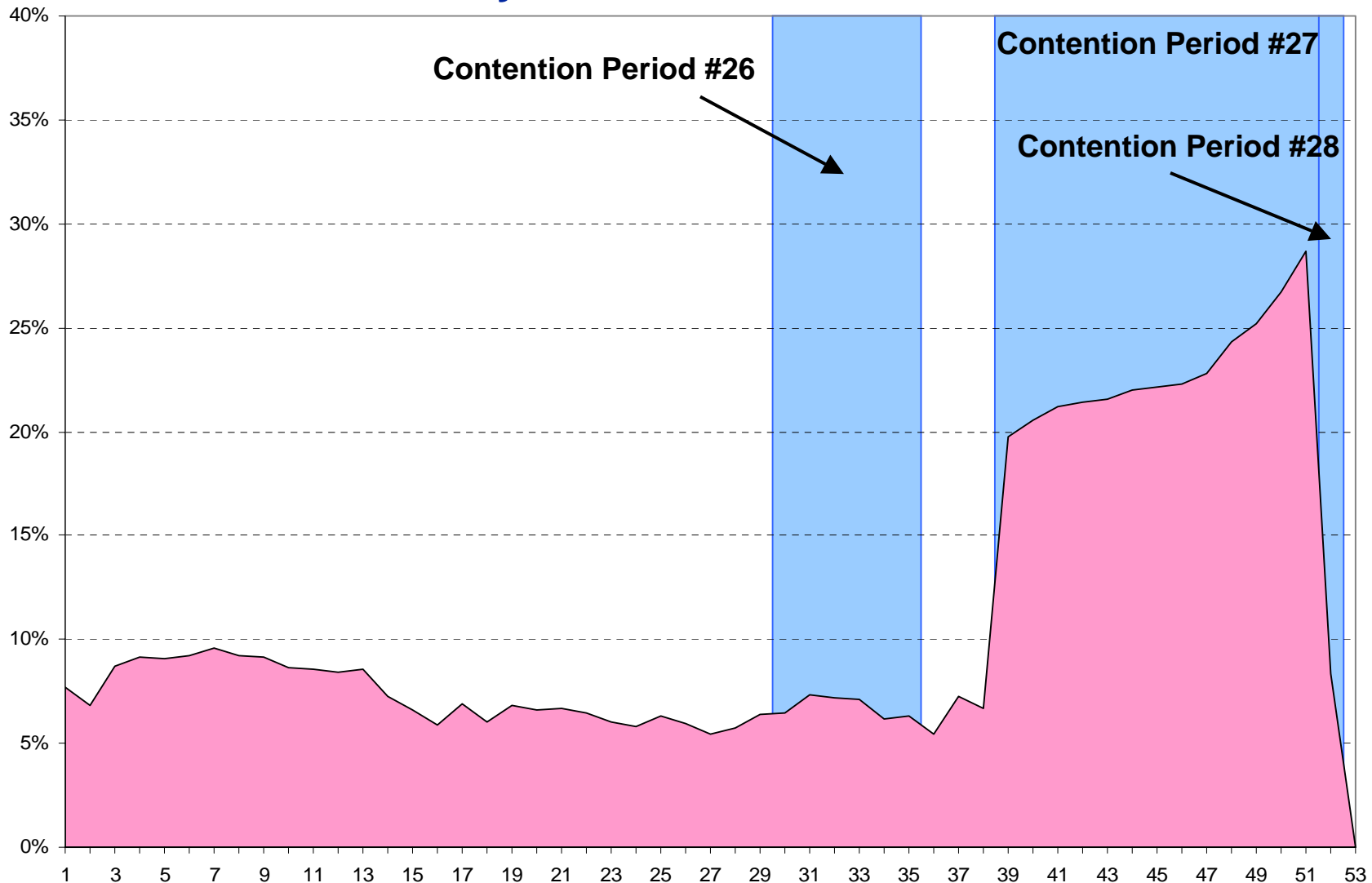
<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
GSSR	MARS RADAR, DSS-14/25, 7 HRS (DOY 202, 211, 219, 225, 231 - 236, 237)	1 - 4
M01O	MAPPING, 7 HRS	4 - 5
MERA	EDL TEST (DOY 218-219) DSS-14/15/24/25/26, 4 HRS	2
VGR1	ROUTINE AND NEGOTIATED SUPPORT	3 - 7

<u>USER</u>	<u>RECOMMENDATION</u>
GSSR	DELETE DOY 219 OBSERVATION (MERA)
M01O	REDUCE TO 3 - 4 PASSES/WK (GSSR, MERA)
MERA	REQUESTED SUPPORT
VGR1	REDUCE SUPPORT IN WK 33 - 35 TO 4 HRS/PASS AND MOVE TO DSS-24 (MEX MOVING TO DSS-26 TO RESOLVE 70M CONTENTION)

Resource Allocation Review Requirements Analysis and Recommendations



2003 Weekly Contention Percent - 34HSB





Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #26 - 34HSB
Late July - August (Weeks 30 - 35)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	MAINTENANCE	1
SOHO	TSO, WK 33, 4 HRS	2

<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REDUCE TO 6 HRS (34M USERS)
SOHO	DELETE WK 33 TSO (34M USERS)

Note: The reduction in time is needed to make room for 34M users (CHDR, CLU1, CLU2, CLU4) moving support to DSS-27 during DSS-54 20 kilowatt transmitter installation and to resolve high contention on 34HEF.

Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #27 - 34HSB
Late September - Mid-December (Weeks 39 - 51)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
ACE	ROUTINE SUPPORT, 3.5 HRS	7
DSS	NEGOTIATED MAINTENANCE, 6 HRS	1
SOHO	HSO SUPPORT	7

<u>USER</u>	<u>RECOMMENDATION</u>
ACE	MOVE SUPPORT IN WK 39 - 47 TO DSS-16 (SOHO)
DSS	REQUESTED SUPPORT
SOHO	SPLIT 1 HSO PASS IN WK 39 - 47 USING 4 HRS AT DSS-27 AND 4 HRS AT DSS-16 (DSS) DELETE HSO SUPPORT IN WK 48 - 51, REPLACE WITH ROUTINE SUPPORT BUT DO NOT SCHEDULE A TSO IN WK 51

Note: Users nominal support will replace reduced or changed support as a result of previous negotiations for HSO placement in weeks 48 - 51.

Change is recommended to provide coverage for missions off-loading from the 70M and 34M during MERA Mars Approach.



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #28 - 34HSB
Late December (Week 52)



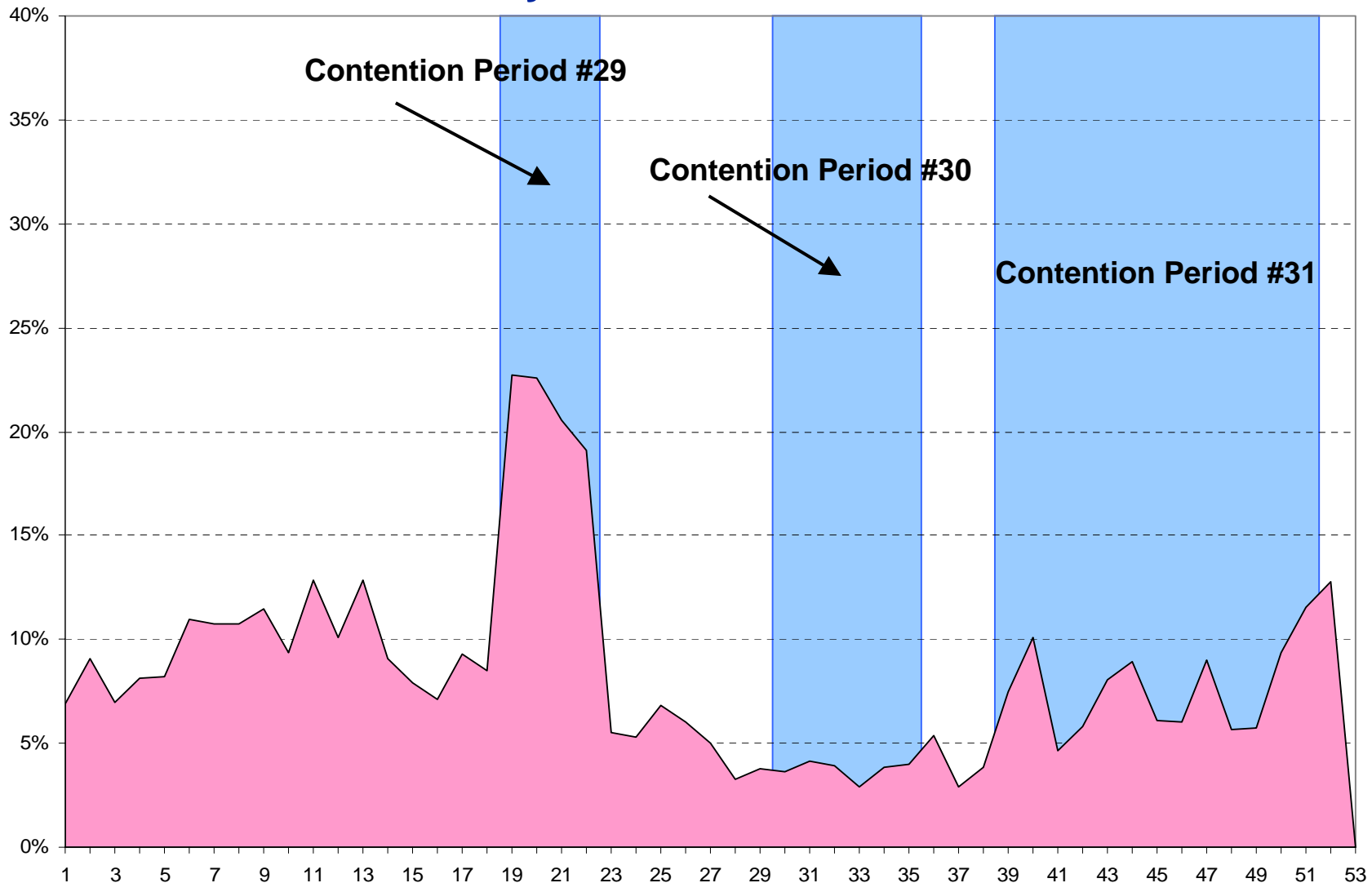
<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
ACE	ROUTINE SUPPORT, 3.5 HRS	7
CLU2II	ARRAY SUPPORT, DSS-16/24/27/15, 1 HR	1
CLU3	ROUTINE SUPPORT, 2 HRS	2
DSS	ROUTINE MAINTENANCE	1

<u>USER</u>	<u>RECOMMENDATION</u>
ACE	MOVE SUPPORT TO DSS-16, 27, 66 (DSS, CLU2II, CLU3)
CLU2II	REQUESTED SUPPORT
CLU3	REQUESTED SUPPORT
DSS	REQUESTED SUPPORT

Resource Allocation Review Requirements Analysis and Recommendations



2003 Weekly Contention Percent - 26M





Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #29 - 26M
May (Weeks 19 - 22)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	ROUTINE MAINTENANCE	2
GTL	ROUTINE SUPPORT, 1.1 HR	21
POLR	PB ROUTINE SUPPORT, 1.0 HR	28
	RT ROUTINE SUPPORT, 2 HR	7

<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REQUESTED SUPPORT
GTL	REQUESTED SUPPORT USING DSS 16, 27, 66 (DSS)
POLR	REQUESTED PB SUPPORT USING DSS-16, 27, 66 (DSS)
	REQUESTED RT SUPPORT USING DSS-27, 66 (DSS)

Note: DSS-46 is down WK 19 - 22 for Servo Hydraulic Drive Replacement.



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #30 - 26M
Late July - August (Weeks 30 - 35)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	ROUTINE/NEGOTIATED MAINTENANCE, 4 - 8 HRS	3
SOHO	TSO (WK 33) ROUTINE, 1.6 - 9.6 HRS	21 - 23

<u>USER</u>	<u>RECOMMENDATION</u>
DSS	CHANGE OR REDUCE MAINTENANCE TO 6 HRS/WK AT EACH ANTENNA (34M USERS)
SOHO	DELETE TSO IN WK 33 AND REDUCE 9.6-HR PASSES TO 6 HRS (34M USERS)

Note: The reduction in time is needed to make room for 34M users (CHDR, CLU1, CLU2, CLU4, INTG) moving support to 26M Subnet during DSS-54 20 kilowatt transmitter installation and to resolve high contention on 34HEF.



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #31 - 26M
Late September - Mid-December (Weeks 39 - 51)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	NEGOTIATED/ROUTINE MAINTENANCE, 4 - 8 HRS	2
INTG	ROUTINE SUPPORT, DSS-16, 5.3 HRS	4 - 7
LUNA	ROUTINE SUPPORT, WK 39, 40, 43, 44, 47, DSS-16, 66	7
SOHO	HSO SUPPORT, DSS-46, 66	14

<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REDUCE DSS-16 MAINT TO 4 HRS IN WK 39 - 47 (ACE, INTG, LUNA)
INTG	REQUESTED SUPPORT
LUNA	REDUCE TO 6 HRS (ACE, DSS, INTG)
SOHO	DELETE HSO SUPPORT IN WK 48 - 51 AND REPLACE WITH ROUTINE SUPPORT BUT DO NOT SCHEDULE A TSO IN WK 51

Note: Users nominal support will replace reduced or changed support as a result of previous negotiations for HSO placement in weeks 48 - 51.

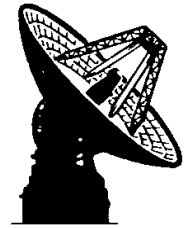
Change is recommended to provide coverage for missions off-loading from the 70M and 34M during MERA Mars Approach.



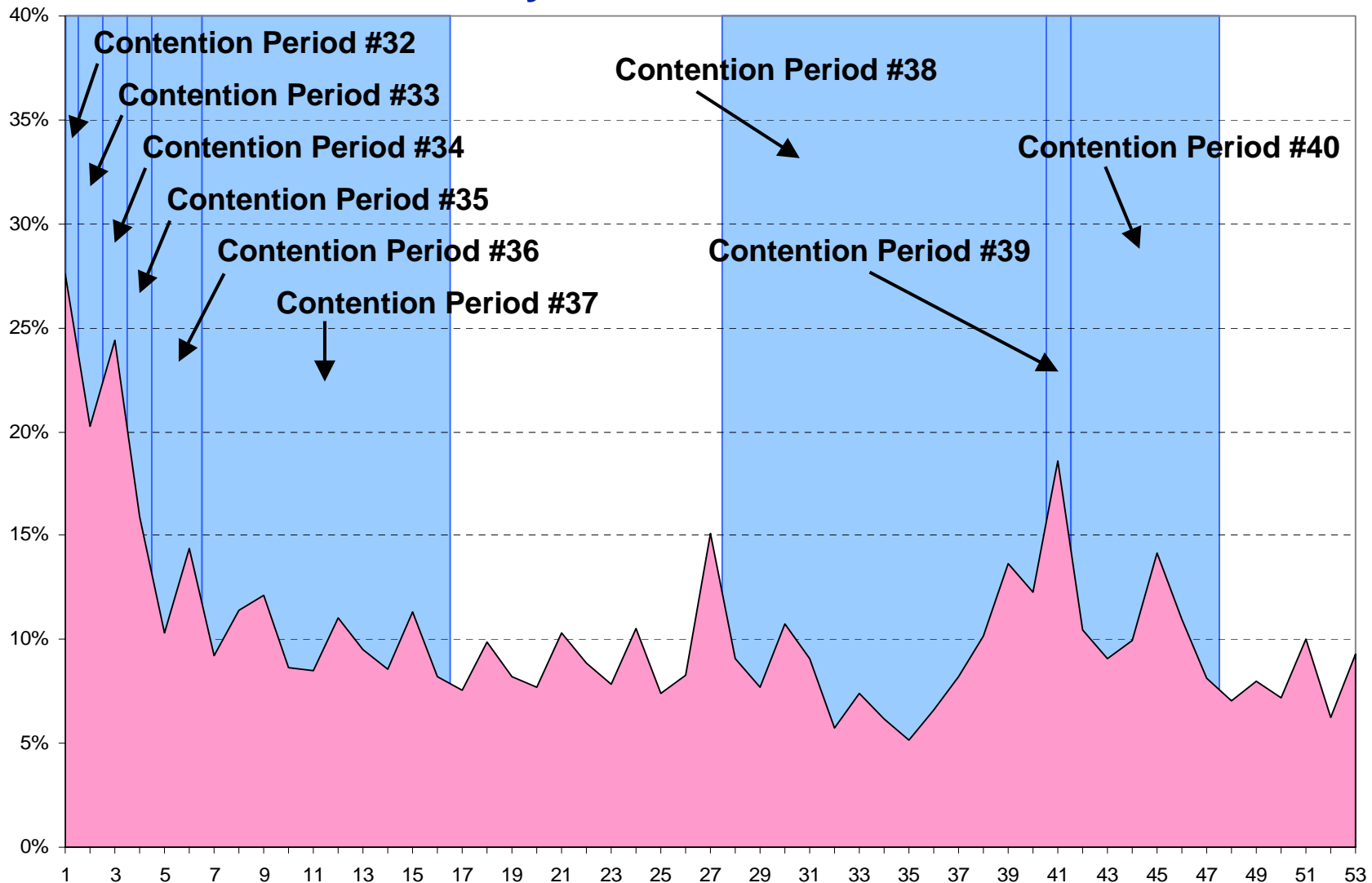
Resource Allocation Review Requirements Analysis and Recommendations

2004 Activities in Contention / Recommendations

Resource Allocation Review Requirements Analysis and Recommendations



2004 Weekly Contention Percent - 70M





Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #32 - 70M

January (Week 01)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSN	ANTENNA CALIBRATION	1
DSS	ROUTINE/BEARING MAINTENANCE, 6 - 10.5 HRS	5
GBRA	M-WAVE SPECT, PLANET R/AST, 9 HRS	4
	VLBA WCB, DSS-14\63	1
GSSR	MERCURY, DSS-14, 5.9 HRS	3
M01O	MAPPING, 7 HRS	14
MAP	MANEUVER/ROUTINE, 45 MIN - 8 HRS	9
MERA	APPROACH, TCM (DOY 003) EDL U/L (DOY 004) 8 - 9 HRS	10
MERB	APPROACH, VLBI, 8 - 9 HRS	2 - 3
MEX /MGS	MSPA MEX CAPTURE/MGS MAPPING, 11 HRS	2 - 3
SDU	P/WILD 2 (TCM)	16
ULYS	ROUTINE SUPPORT, DSS-63, 10 HRS	0 - 1

Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #32 - 70M

January (Week 01) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
DSN	REDUCE SUPPORT TO 4 HRS (MAP, SDU)
DSS	REDUCE MAINTENANCE TO 8-HRS PER ANTENNA (M01O, MERA, SDU)
GBRA	MOVE VLBA WCB TO WK 21 AND REDUCE REMAINING SUPPORT TO 4 HRS PER EVENT (MAP, SDU)
GSSR	DELETE SUPPORT (DSS, M01O, MERA, SDU)
M01O	REDUCE DOY 003 AND 004 SUPPORT TO 4 HRS FOR S/C HEALTH AND SAFETY AND REDUCE REMAINING SUPPORT TO FIVE 8-HR PASSES (MERA)
MAP	MOVE MANEUVER TO WEEK 11 (M01O, MERA)
MERA	REQUESTED SUPPORT
MERB	PERFORM APPROACH/VLBI REQUEST PRIOR TO DOY 003 USING 34HEF ANTENNAS (M01O, MERA)
MEX	REQUESTED SUPPORT USING DSS-55 (M01O, MERA)
/MGS	REQUESTED MSPA WITH MEX USING DSS-55 (M01O, MERA)
SDU	REDUCE 3 PASSES TO 4 HRS (DSS, M01O, MERA)
ULYS	REQUESTED SUPPORT USING DSS-54 (DSS, M01O, MERA)

Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #33 - 70M

January (Week 02)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	ROUTINE/BEARING MAINTENANCE, 6 - 10.5 HRS	5
GSSR	MERCURY, DSS-14, 5.9 HRS	2
M01O	MAPPING (4 MSPA PASSES WITH MERA D/L) 7 - 8 HRS	14
MERA	SURFACE (STAND ALONE PASSES, NO MSPA)	3
MERB	APPROACH AND VLBI, 8 - 9 HRS	4
MEX	CAPTURE, DSS-63, 11 HRS	2 - 3
SDU	P/WILD 2 (CONTINUOUS ON DOY 005, 007 - 009, 011)	15

<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REDUCE MAINTENANCE TO 8-HRS PER ANTENNA AND MOVE TO OFF-SHIFT HRS (M01O, MERA, SDU)
GSSR	DELETE SUPPORT (SDU, VGR1)
M01O	REQUESTED MSPA SUPPORT WITH MERA D/L MSPA 3 PASSES WITH MEX (MERA, MERB, MEX)
MERA	REQUESTED SUPPORT
MERB	REQUESTED SUPPORT USING 34HEF (DSS, MERA, M01O)
MEX	REDUCE TO 8-HR PASSES AND MSPA 3 PASSES WITH M01O (MERA, MERB, M01O)
SDU	REQUESTED SUPPORT



Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #34 - 70M
January (Week 03)



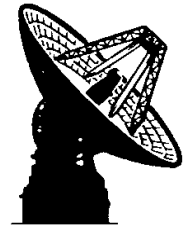
<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	ROUTINE/BEARING MAINTENANCE, 6 - 10.5 HRS	6
GBRA	M-WAVE SPECT, PLANET R/AST, 9 HRS	4
	HOST COUNTRY, DSS-63, 24 HRS	1
M01O	MAPPING (7 MSPA PASSES WITH MERA D/L) 7 - 8 HRS	14
/MERA	D/L MSPA WITH M01O	
MAP	ROUTINE SUPPORT, 45 MIN	7
MERB	TCM (DOY 015) APPROACH/VLBI, 8 - 9 HRS	11 - 12
MEX	CAPTURE, DSS-63, 11 HRS	2 - 3
SDU	P/WILD 2 (CONTINUOUS ON DOY 012 - 013)	6
VGR1	ROUTINE UPLINK, 2.5 HRS	1
VGR2	ROUTINE UPLINK, DSS-43, 2.5 HRS	1

Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #34 - 70M

January (Week 03) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REDUCE SUPPORT TO 8 HRS PER ANTENNA AND PERFORM DSS-43 MAINTENANCE AFTER DOY 013 (M01O, MERB, MEX, SDU)
GBRA	DELETE HOST COUNTRY AND REDUCE M-WAVE SPECT AND PLANET R/AST SUPPORTS TO 6 HRS (M01O, MAP, MERB, MEX, SDU)
M01O	REQUESTED MSPA WITH MERA D/L, MSPA 2 - 3 PASSES WITH MEX, AND REDUCE 4 - 5 PASSES TO 4 HRS (MERB, MEX)
/MERA	REQUESTED MSPA WITH M01O
MAP	REQUESTED SUPPORT
MERB	REQUESTED SUPPORT
MEX	REDUCE TO 8-HR PASSES AND MSPA 2 - 3 PASSES WITH M01O (DSS, M01O, MERB)
SDU	REQUESTED SUPPORT
VGR1	PERFORM U/L AFTER DOY 013 (SDU)
VGR2	PERFORM U/L AFTER DOY 013 (SDU)



Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #35 - 70M

January (Week 04)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	ROUTINE/BEARING MAINTENANCE, 6 - 10.5 HRS	5
GBRA	HOST COUNTRY, DSS-43, 24 HRS	1
M01O	MAPPING (7 MSPA PASSES WITH MERA D/L) 7 - 8 HRS	14
/MERA	MSPA SURFACE D/L WITH M01O	
MERB	APPROACH/VLBI, TCM (DOY 024) EDL U/L (DOY 025)	11
	DSS-14, 43 AND EDL ARRAY DSS-63/65/54/55	
MEX	CAPTURE (MSPA WITH MGS) DSS-63, 11 HRS	2
/MGS	MSPA MAPPING WITH MEX	

Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #35 - 70M

January (Week 04) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REDUCE MAINTENANCE TO ONE 8-HR SUPPORT AT EACH ANTENNA (M01O/MERA, MERB, MEX/MGS)
GBRA	SPLIT HOST COUNTRY INTO TWO 10-HR SUPPORTS (M01O/MERA, MERB, MEX/MGS)
M01O	REDUCE 2 MSPA PASSES WITH MERA (DOY 024 AND 025) TO 4 HRS AND REDUCE FIVE NON-MSPA MAPPING PASSES TO 4 HRS (DSS, MERB, MEX)
/MERA	REDUCE 2 MSPA PASSES WITH M01O TO 4 HRS ON DOY 024 AND 025 (MERB)
MERB	REQUESTED SUPPORT
MEX	REDUCE 1 MSPA PASS WITH MGS TO 8 HRS AND 1 TO 4 HRS (DSS, M01O, MERB)
/MGS	REDUCE 1 MSPA PASS WITH MEX TO 8 HRS AND 1 TO 4 HRS (DSS, M01O, MERB)



Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #36 - 70M
Late January - Early February (Weeks 05 - 06)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	ROUTINE/BEARING MAINTENANCE, 6 - 10.5 HRS	5 - 6
GBRA	M-WAVE SPECT, PLANET R/AST, 9 HRS	4
	VLBA WCB, DSS-14\63, WK 06	1
GSSR	ASTEROID 6239 MINOS, DSS-14	2
M01O	MAPPING (INCLUDES 7 MSPA PASSES WITH MERA)	14
/MERA	MSPA D/L WITH M01O	
MAP	ROUTINE SUPPORT, 45 MIN	7
MERB	SURFACE	7
MEX	R/S BI STATIC, DSS-14, 63, 3 HRS	1
VGR1	MAGROL (DOY 037) AND UPLINK, 2.5 - 7 HRS	1 - 2



Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #36 - 70M

Late January - Early February (Weeks 05 - 06) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
DSS	DELETE 1 DSS-14 ROUTINE SUPPORT IN WK 06 (M01O, GSSR)
GBRA	REDUCE TO 6 HR SUPPORTS AND DELETE VLBA WCB (DSS, MAP, VGR1)
GSSR	REDUCE WK 06 SUPPORTS TO 5 HRS (DSS, M01O, MERB)
M01O	REQUESTED MSPA WITH MERA D/L AND MSPA 7 PASSES WITH MERB (DSS, MERB, MEX)
/MERA	REQUESTED MSPA WITH M01O
MAP	REQUESTED SUPPORT
MEX	REQUESTED SUPPORT
MERB	MSPA 7 PASSES WITH M01O (DSS, M01O, MEX)
VGR1	REQUESTED MAGROL USING A SPLIT PASS, 4 HRS AT DSS-63 AND 4 HRS AT DSS-15 (DSS)

Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #37 - 70M
Mid-February - Mid-April (Weeks 07 - 16)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	ROUTINE/BEARING MAINTENANCE, 6 - 10.5 HRS	5 - 6
EVN	QUARTERLY EPOCH, WK 08, DSS-14\63, 16 HRS	2
GBRA	RADIO STARS WCB, WK 07, 13, DSS-14\63, 14 HRS	1
	QUARTERLY RA500 WCB, WK 09, DSS-14\63, 24 HRS	1
	VLBA WCB, WK 10 AND 14, DSS-14\63	1
	HOST COUNTRY, WK 15, 16, DSS-43, 63, 24 HRS	1
GSSR	MERCURY, WK 15, 16, DSS-14, 5.9 HRS	2 - 3
M01O	MAPPING (DAILY MSPA WITH MERA TO DOY 097 AND WITH MERB DOY 098) WK 16	14
/MERA	DAILY MSPA D/L WITH M01O	
MAP	MANEUVER, WK 14, ROUTINE, 45 MIN - 8 HRS	7 - 9
MERB	SURFACE	7
MEX	R/S BI STATIC, DSS-14, 63, 3 HRS	1



Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #37 - 70M
Mid-February - Mid-April (Weeks 07 - 16) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REQUESTED SUPPORT
EVN	REDUCE TO 12 HRS (DSS, M01O, MERB, MEX)
GBRA	SPLIT EACH HOST COUNTRY AND RA500 WCB INTO TWO 12-HR SUPPORTS AND REDUCE RADIO STARS TO 8 HRS (M01O/MERA, MAP, MERB, MEX)
GSSR	REDUCE TO 3-HR SUPPORTS (DSS, M01O, MERA, MERB)
M01O	REQUESTED MSPA WITH MERA D/L MSPA 7 PASSES WITH MERB (DSS, MERB, MEX)
/MERA	REQUESTED MSPA WITH M01O
MAP	MOVE MANEUVER TO WK 25
MERB	MSPA 7 PASSES WITH M01O (DSS, M01O, MEX)
MEX	REQUESTED SUPPORT



Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #38 - 70M
July - Early October (Weeks 28 - 40)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	DSS-14 ANTENNA CONTROLLER REPLACEMENT ROUTINE/BEARING MAINTENANCE, 6 - 10.5 HRS	(DOY 187 - 277) 5 - 6
CNTR	ROUTINE SUPPORT, WK 28	1
DSN	ANTENNA CALIBRATION, WK 28, 29, 31 - 33, 36 - 38, 40	1
EVN	CALIBRATION, WK 32, 40, DSS-63, 3 HRS QUARTERLY EPOCH, WK 37, DSS-14\63, 16 HRS	1 2
GBRA	M-WAVE SPECT, PLANET R/AST, 9 HRS VLBA WCB, WK 32, 36, 40, DSS-14\63 HOST COUNTRY, WK 28, 29, DSS-43, 63, 24 HRS RADIO STARS, WK 33, 39, DSS-14\63, 14 HRS QUARTERLY RA500, WK 37, DSS-14\63, 24 HRS	4 1 1 1 1
GODR	ROUTINE, WK 28, 30, 32, 34, DSS-14/15	1
GSSR	TOUTATIS A AND B, WK 38 - 40, 4 - 5 HRS MERCURY, WK 33 - 35, DSS-14, 5.9 HRS	2 - 6 2 - 3

Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #38 - 70M
July - Early October (Weeks 28 - 40) (Continued)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
MO10	MAPPING, WK 28 - 31, 7 HRS	14
MAP	MANEUVER, WK 40, ROUTINE, 45 MIN - 8 HRS	7 - 9
MEX	R/S SOLAR CORONA, WK 38 - 40, DSS-14, 63	7
	R/S BI STATIC, DSS-14, 63, 3 HRS	1
NOZO	RADIO SCIENCE, DSS-14, 63, 3 HRS	3
SRTF	ROUTINE SUPPORT, WK 33 - 40, 1 HR	14
SVLB	RADA SUPPORT	4 - 8
ULYS	ROUTINE AND DATATION TEST, DSS-63, 10 - 11.5 HRS	0 - 1
VGR1	MAGROL (DOY 220) DSS-14, OVERLAY (DOY 250) AND UPLINK, 2.5 - 7 HRS	1 - 2
VGR2	ROUTINE, WK 33 - 40, UPLINK, DTR P/B (DOY 252) ASCAL (DOY 257) MAGROL (DOY 260) DSS-43, 2 - 7 HRS	4 - 7

Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #38 - 70M
July - Early October (Weeks 28 - 40) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
DSS	DSS-14 ANTENNA CONTROLLER DOWNTIME APPROVED DELETE DSS-14 ROUTINE AND BEARING MAINTENANCE REDUCE DSS-43 AND 63 EACH TO ONE 8-HR SUPPORT IN WK 28 - 31 (M01O)
CNTR	REQUESTED SUPPORT USING DSS-43 OR 63 (DSS)
DSN	DELETE DSS-14 SUPPORT (DSS)
EVN	DELETE SUPPORT IN WK 32 AND 37 AND MOVE WK 40 CALIBRATION TO WK 41 (DSS)
GBRA	MOVE RA500 TO 2005 WK 01, DELETE DSS-14 SUPPORT AND SPLIT EACH HOST COUNTRY INTO THREE 8-HR SUPPORTS (DSS, M01O)
GODR	DELETE SUPPORT (DSS)
GSSR	DELETE TOUTATIS A AND B AND MERCURY SUPPORT (DSS)
M01O	MSPA 1 PASS/WK WITH MEX R/S BI STATIC AND MOVE 2 PASSES/WK TO DSS-45, 65 (DSS, MEX)
MAP	MOVE MANEUVER TO WK 38 AND USE DSS-43, 63 (DSS)

Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #38 - 70M
July - Early October (Weeks 28 - 40) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
MEX	MSPA R/S BI STATIC WITH M01O IN WK 28 - 31 AND USE DSS-63 FOR SOLAR CORONA SUPPORT IN WK 32 - 40 (DSS, M01O)
NOZO	REQUESTED SUPPORT USING DSS-25, 65 (DSS, M01O, MEX)
SRTF	REQUESTED SUPPORT USING DSS-43, 63 (DSS)
SVLB	DELETE SUPPORT AT DSS-14 (DSS)
ULYS	REQUESTED SUPPORT USING DSS-54 IN WK 28 - 31 AND 38 - 40 (DSS, M01O, MEX)
VGR1	REQUESTED U/L USING DSS-43, 63 AND REQUESTED MAGROL USING DSS-63 (DSS)
VGR2	REQUESTED ASCAL, P/B, AND MAGROL SUPPORT REDUCE ROUTINE SUPPORT TO 8-HR PASSES (DSS, GBRA, SRTF, SVLB)

Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #39 - DSS-14, 63
Early October (Week 41)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	ROUTINE/BEARING MAINTENANCE, 6 - 10.5 HRS	4
GBRA	HOST COUNTRY, DSS-63, 24 HRS	1
GSSR	TOUTATIS B, DSS-14	7
MEX	R/S BI STATIC AND SOLAR CORONA, 3 - 7.9 HRS	8
NOZO	RADIO SCIENCE, 3 HRS	3
ULYS	ROUTINE SUPPORT, 10 HRS	0 - 1

<u>USER</u>	<u>RECOMMENDATION</u>
DSS	MOVE DSS-14 MAINTENANCE OFF SHIFT (GSSR, MEX)
GBRA	SPLIT HOST COUNTRY INTO THREE 8-HR SUPPORTS (GSSR, MEX)
GSSR	REDUCE 2 SUPPORTS TO 5 HRS (MEX)
MEX	REDUCE 2 R/S SOLAR CORONA PASSES TO 5 HRS (DSS, GSSR)
NOZO	REQUESTED SUPPORT USING DSS-15, 65 (DSS, GSSR, MEX)
ULYS	REQUESTED SUPPORT USING DSS-54 (DSS, MEX)

Resource Allocation Review

Requirements Analysis and Recommendations

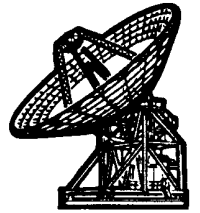
2004 - Contention Period #40 - 70M
Mid-October - Mid-November (Weeks 42 - 47)



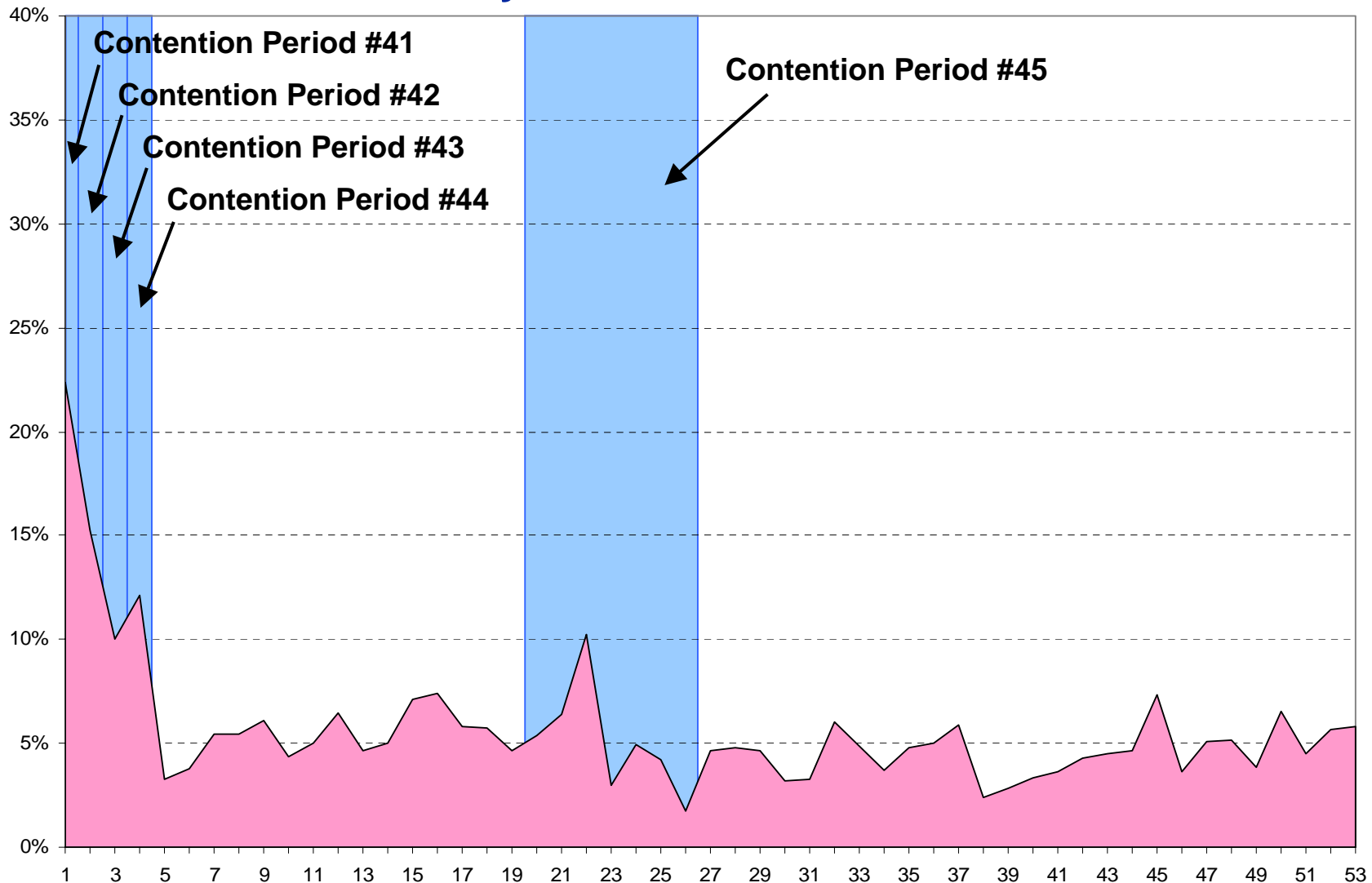
<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	ROUTINE/BEARING MAINTENANCE, 6 - 10.5 HRS	5 - 6
GBRA	QUARTERLY RA500 WCB, WK 45, DSS-14\63, 24 HRS	1
	VLBA WCB, WK 45	1
MEX	R/S BI STATIC AND SOLAR CORONA, 3 - 7.9 HRS	8
NOZO	RADIO SCIENCE, 3 HRS	3
ULYS	ROUTINE SUPPORT, 10 HRS	0 - 1
VGR1	MAGROL (DOY 310) WK 45, DSS-14, 7 HRS	1

<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REDUCE 1 DSS-14 ROUTINE SUPPORT/WK TO 4 HRS (MEX)
GBRA	MOVE RA500 TO WK 48 AND REDUCE VLBA TO 6 HRS (DSS, MEX)
MEX	REDUCE 2 SOLAR CORONA PASSES/WK TO 5 HRS (DSS)
NOZO	REQUESTED SUPPORT USING DSS-15, 65 (DSS, MEX)
ULYS	REQUESTED SUPPORT USING DSS-34, 54 (MEX)
VGR1	REQUESTED MAGROL SUPPORT USING A SPLIT PASS 4 HRS AT DSS-15 AND 4 HRS AT DSS-63 (DSS, MEX)

Resource Allocation Review Requirements Analysis and Recommendations



2004 Weekly Contention Percent - 34HEF





Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #41 - 34HEF

January (Week 01)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CAS	GRAVITATIONAL WAVE, DSS-45, 65	14
CLU4	ROUTINE SUPPORT, DSS-15, 45, 2 HRS	2
DEEP	LAUNCH (DOY 002 - 004) DSS-15	3
DSS	MAINTENANCE, 6 - 8 HRS	3
MERA	APPROACH AND VLBI, EDL (DOY 004) U/L AND EDL ARRAY, DSS-14/15/24/25/26, 8 - 9 HRS	11
MERB	APPROACH AND VLBI, 8 - 9 HRS	14 - 16
SDU	TCM (2003 DOY 363) 4 HRS	2
VGR2	NEGOTIATED SUPPORT, DSS-45	3 - 4

Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #41 - 34HEF
January (Week 01) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
CAS	REDUCE TO 6-HR PASSES (MERA, MERB)
CLU4	REQUESTED SUPPORT USING DSS-16, 27, 46 (CAS, DEEP, DSS, MERA, MERB)
DEEP	REQUESTED SUPPORT
DSS	REDUCE DSS-15 MAINTENANCE TO 6 HRS (MERA, MERB)
MERA	REQUESTED SUPPORT USING 70M FOR APPROACH/VLBI PASSES (MERB)
MERB	MOVE 6 PASSES TO DSS-26, 34, 55 (MERA)
SDU	REQUESTED SUPPORT USING DSS-15, 65 (DSS, MERA, MERB, VGR2)
VGR2	REDUCE TO 6-HR PASSES (CAS, MERA, MERB)



Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #42 - 34HEF
January (Week 02)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CAS	GRAVITATIONAL WAVE, DSS-45, 65	14
CLU4	ROUTINE SUPPORT, DSS-15, 45, 2 HRS	2
DEEP	LAUNCH SUPPORT, DSS-15	7
DSN	CLOCK SYNC, DSS-15\65, 4 HRS	1
DSS	MAINTENANCE, 6 - 8 HRS	3
GBRA	HOST COUNTRY, DSS-45, 12 HRS	1
MERA	SURFACE UPLINK, 1 HR	4
MERB	APPROACH AND VLBI, 8 - 9 HRS	17
SDU	P/WILD 2, 4 HRS	2
VGR2	NEGOTIATED SUPPORT, DSS-45	3 - 4

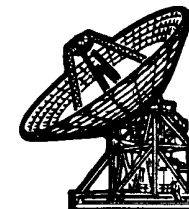


Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #42 - 34HEF

January (Week 02) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
CAS	REDUCE PASSES TO 4 - 5 HRS (MERB)
CLU4	REQUESTED SUPPORT USING DSS-16, 27, 46 (CAS, DEEP, DSS, MERA, MERB)
DEEP	REQUESTED SUPPORT
DSN	REQUESTED SUPPORT
DSS	REDUCE DSS-15 MAINTENANCE TO 6 HRS (MERB)
GBRA	MOVE SUPPORT TO WK 14 (CAS, MERB, VGR2)
MERA	REQUESTED SUPPORT
MERB	REQUESTED SUPPORT
SDU	REQUESTED SUPPORT USING DSS-15, 65 (DSS, MERA, MERB, VGR2)
VGR2	REDUCE TO 6-HR PASSES (CAS, MERA, MERB)



Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #43 - 34HEF
January (Week 03)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CAS	GRAVITATIONAL WAVE, DSS-45, 65	14
CLU4	ROUTINE SUPPORT, DSS-15, 45, 2 HRS	2
DEEP	LAUNCH SUPPORT, DSS-15	7
DSS	MAINTENANCE, 6 - 8 HRS	3
MERA	SURFACE UPLINK, 1 HR	7
MERB	APPROACH AND VLBI, 8 - 9 HRS	8 - 10
SDU	TCM, 4 HRS	10
SGP	CRUSTAL DYN, DSS-45, 65, 24 HRS	2
VGR2	NEGOTIATED SUPPORT, DSS-45	3 - 4



Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #43 - 34HEF
January (Week 03) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
CAS	REDUCE DSS-65 PASSES TO 5 HRS (MERB)
CLU4	REQUESTED SUPPORT USING DSS-16, 27, 46 (DEEP, MERB, SDU)
DEEP	REQUESTED SUPPORT
DSS	REQUESTED SUPPORT
MERA	USE DSS-26, 55 FOR UPLINK SUPPORT (DEEP, MERB)
MERB	REQUESTED SUPPORT
SDU	REQUESTED SUPPORT USING DSS-15, 65 (VGR2)
SGP	MOVE SUPPORT TO WK 18 AND 19 (CAS, MERB)
VGR2	REQUESTED SUPPORT



Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #44 - 34HEF
January (Week 04)



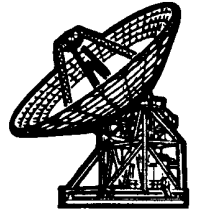
<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CAS	GRAVITATIONAL WAVE (ENDS DOY 023) DSS-45, 65	15
CLU2	ARRAY SUPPORT, DSS-16/24/27/15	1
CLU4	ROUTINE SUPPORT, DSS-15, 45, 2 HRS	2
DEEP	LAUNCH SUPPORT, DSS-15	5 - 6
DSN	CLOCK SYNC, DSS-15\65, 4 HRS	1
DSS	MAINTENANCE, 6 - 8 HRS	3
MERA	SURFACE UPLINK, 1 HR	7
MERB	APPROACH AND VLBI, 8 - 9 HRS	10
	EDL ARRAY (DOY 025) DSS-63/65/54/55	1
SDU	TCM, 4 HRS	14
SGP	CRUSTAL DYN, DSS-45, 24 HRS	1
VGR2	NEGOTIATED SUPPORT, DSS-45	3 - 4



Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #44 - 34HEF
January (Week 04) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
CAS	REDUCE TO 5-HR PASSES (MERB)
CLU2	DELETE DSS-15 FROM REQUESTED ARRAY (DEEP, MERB, SDU)
CLU4	REQUESTED SUPPORT USING DSS-16, 27, 46 (DEEP, MERB, SDU)
DEEP	MOVE 4 PASSES TO DSS-26 (MERB)
DSN	DELETE SUPPORT
DSS	REDUCE DSS-15 AND 65 MAINTENANCE TO 4 HRS (MERB)
MERA	REQUESTED SUPPORT USING DSS-26 (CAS, DEEP, MERB)
MERB	REQUESTED SUPPORT
SDU	REQUESTED SUPPORT
SGP	DELETE SUPPORT (CAS, MERB, SDU, VGR2)
VGR2	REQUESTED SUPPORT



Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #45 - 34HEF
Mid-May - Late June (Week 20 - 26)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	REPLACE DSS-65 ANTENNA CONTROLLER MAINTENANCE, 6 - 8 HRS	(DOY 131 - 179) 3
CAS	TCM (DOY 147, 168) APPROACH, 8 - 9 HRS	3 - 6
DSN	CAT M&E, WK 23, 24, DSS-15\45, 15\65, 24 HRS CLOCK SYNC, WK 20, 22, 24, 26, DSS-15\65, 4 HRS	1 1
GODR	ROUTINE SUPPORT, DSS-14/15, WK 20, 22, 24, 26	1
MGS	MAPPING, WK 20 - 24	3 - 10
SDU	ROUTINE SUPPORT, 6 HRS	1
SGP	CRUSTAL DYN, WK 21, 22, 26, DSS-45, 65, 24 HRS	1 - 2
SRTF	ROUTINE SUPPORT, 1 HR	7
VGR1	ROUTINE/NEGOTIATED SUPPORT, DSS-65, 4 - 8 HRS	7

Resource Allocation Review

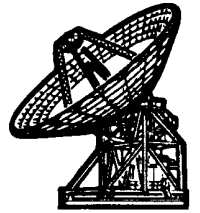
Requirements Analysis and Recommendations

2004 - Contention Period #45 - 34HEF
Mid-May - Late June (Week 20 - 26) (Continued)

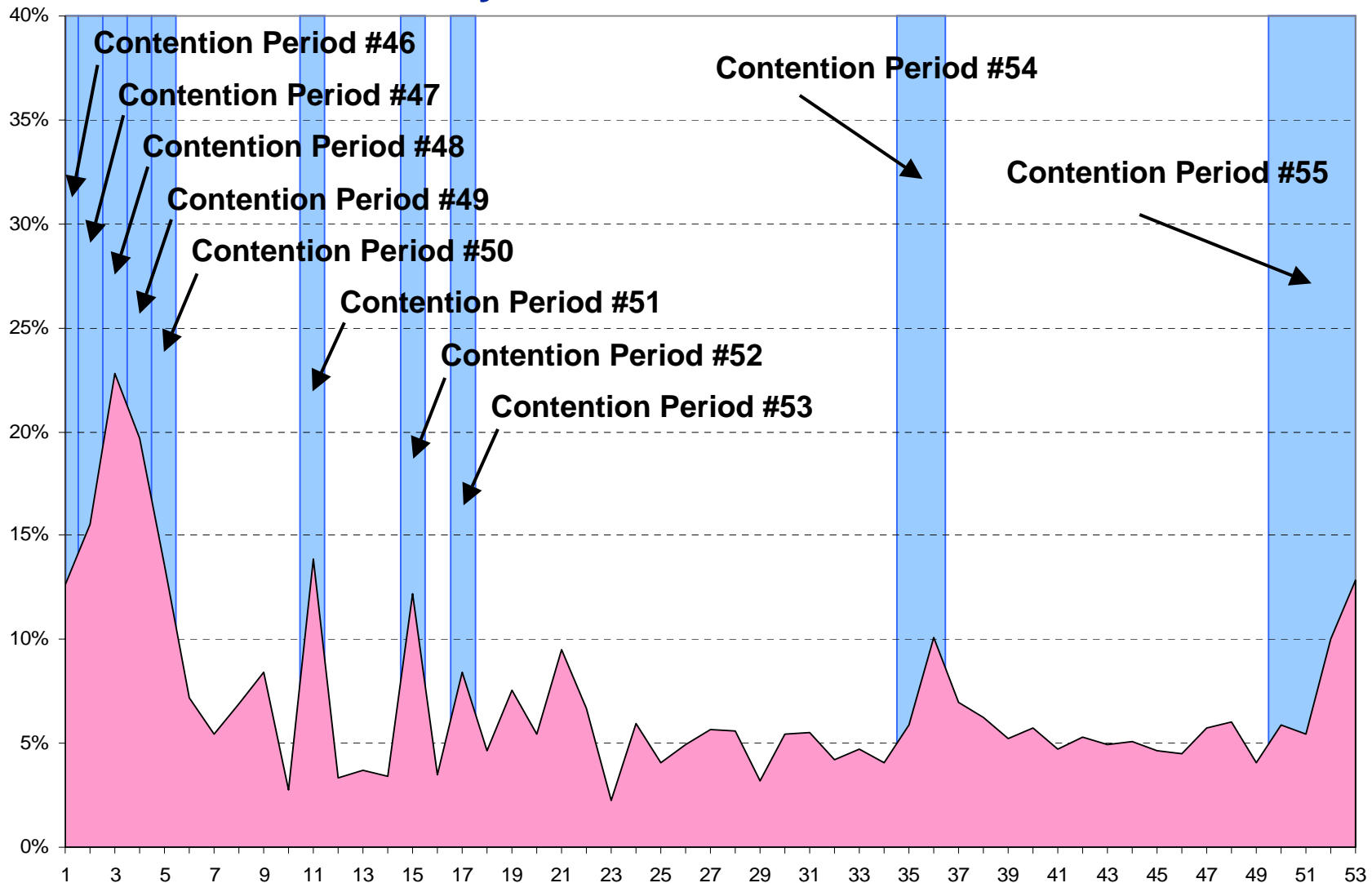


<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REQUESTED DOWNTIME, DELETE DSS-65 MAINTENANCE
CAS	REQUESTED SUPPORT USING DSS-25, 45 (DSS)
DSN	DELETE CAT M&E AND CLOCK SYNC SUPPORT AT DSS-15\65 SPLIT DSS-15\45 CAT M&E INTO THREE 8-HR SUPPORTS (DSS, 34HEF USERS)
GODR	DELETE SUPPORT (DSS)
MGS	REQUESTED SUPPORT USING 3 - 5 PASSES/WK AT DSS-15, 45 AND 4 - 5 MSPA PASSES/WK WITH M010 ON 70M (CAS, DSS)
SDU	REQUESTED SUPPORT USING DSS-15, 45 (DSS)
SGP	SPLIT DSS-45 CRUSTAL DYN INTO THREE 8-HR SUPPORTS DELETE SUPPORT AT DSS-65 (DSS, 34HEF USERS)
SRTF	REMOVE DSS-65 FROM GROUP OF REQUESTED ANTENNAS (DSS)
VGR1	DELETE SUPPORT AT DSS-65 (DSS)

Resource Allocation Review Requirements Analysis and Recommendations



2004 Weekly Contention Percent - 34BWG1



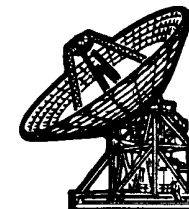


Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #46 - 34BWG1

January (Week 1)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CHDR	ROUTINE SUPPORT, 1 HR	21
CLU1	ROUTINE SUPPORT, DSS-24, 34, 2 HRS	2
CLU2	ROUTINE SUPPORT, DSS-24, 34, 2 HRS	2
CLU4	ROUTINE SUPPORT, DSS-24, 2 HRS	1
DEEP	LAUNCH (DOY 002 - 004) DSS-34, 54	6
IMAG	ROUTINE SUPPORT, 50 MIN - 1.5 HRS	14
INTG	ROUTINE SUPPORT, WK 01, DSS-24	1
MERA	EDL ARRAY (DOY 004) DSS-14/15/24/25/26	1
MEX	CAPTURE (MSPA WITH MGS) DSS-54, 11 HRS	2 - 3
/MGS	MSPA WITH MEX	
NOZO	TCM/MOI (DOY 001 - 004) DSS-24, 54	4
SRTF	ROUTINE SUPPORT, DSS-34, 54, 1 HR	9 - 10

Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #46 - 34BWG1

January (Week 1) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
CHDR	MOVE 14 PASSES TO 26M (34 METER USERS)
CLU1	REQUESTED SUPPORT USING DSS-27, 46 (34 METER USERS)
CLU2	REQUESTED SUPPORT USING DSS-27, 46 (34 METER USERS)
CLU4	REQUESTED SUPPORT USING DSS-16, 27 (34 METER USERS)
DEEP	REQUESTED SUPPORT
IMAG	REQUESTED SUPPORT
INTG	REQUESTED SUPPORT USING DSS-16 (34 METER USERS)
MERA	DELETE DSS-24 SUPPORT FROM EDL ARRAY (NOZO)
MEX	REQUESTED SUPPORT
/MGS	REQUESTED SUPPORT
NOZO	REQUESTED SUPPORT USING DSS-24 (DEEP)
SRTF	REQUESTED SUPPORT USING DSS-25, 55 (DEEP, MEX)



Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #47 - 34BWG1

January (Week 2)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CHDR	ROUTINE SUPPORT, 1 HR	21
CLU1	ROUTINE SUPPORT, DSS-24, 34, 2 HRS	2
CLU2	ROUTINE SUPPORT, DSS-24, 34, 2 HRS	2
CLU4	ROUTINE SUPPORT, DSS-24, 2 HRS	1
DEEP	LAUNCH SUPPORT, DSS-34, 54	14
DSS	MAINTENANCE, 6 - 8 HRS	3
GNS	ROUTINE SUPPORT, 4 - 8 HRS	4
IMAG	ROUTINE SUPPORT, 50 MIN - 1.5 HRS	14
MEX	CAPTURE, DSS-54, 11 HRS	2 - 3
MGS	TCM, DSS-34	3 - 4
MUSC	TCM, DSS-34, 54, 3 HRS	0 - 1
SRTF	ROUTINE SUPPORT, DSS-34, 54, 1 HR	9 - 10
ULYS	ROUTINE SUPPORT, 10 HRS	6 - 7
VGR2	NEGOTIATED SUPPORT, DSS-34	3 - 4

Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #47 - 34BWG1

January (Week 2) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
CHDR	MOVE 14 PASSES TO 26M (DEEP, DSS, MGS, VGR2)
CLU1	REQUESTED SUPPORT USING DSS-27, 46 (DEEP, DSS, MGS, VGR2)
CLU2	REQUESTED SUPPORT USING DSS-27, 46 (DEEP, DSS, MGS, VGR2)
CLU4	REQUESTED SUPPORT USING DSS-16, 27 (DSS, GNS, ULYS)
DEEP	TAKE 2 - 3 GAPS OF ABOUT 1 - 2 HRS EACH (MEX)
DSS	REQUESTED SUPPORT
GNS	REQUESTED SUPPORT USING DSS-24, 54 (DEEP, VGR2)
IMAG	REQUESTED SUPPORT
MEX	REDUCE TO 8-HR PASSES (DEEP)
MGS	REDUCE TO 4-HR PASSES (DEEP, DSS, MUSC)
MUSC	REQUESTED SUPPORT
SRTF	REQUESTED SUPPORT USING DSS-25, 55 (DEEP, DSS, MGS, VGR2)
ULYS	REDUCE DSS-54 SUPPORT TO 8 HRS/PASS AND MOVE DSS-34 PASSES TO DSS-24, 54 (DEEP, VGR2)
VGR2	REDUCE TO 6 HRS (MGS, MUSC)



Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #48 - 34BWG1

January (Week 3)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CHDR	ROUTINE SUPPORT, 1 HR	21
CLU1	ROUTINE SUPPORT, DSS-24, 34, 2 HRS	2
CLU2	ROUTINE SUPPORT, DSS-24, 34, 2 HRS	2
CLU4	ROUTINE SUPPORT, DSS-24, 2 HRS	1
DEEP	LAUNCH SUPPORT, DSS-34, 54	14
DSS	MAINTENANCE, 6 - 8 HRS	3
GNS	MANEUVER (DOY 014 - 015) AND ROUTINE SUPPORT	11
IMAG	ROUTINE SUPPORT, 50 MIN - 1.5 HRS	14
MEX	CAPTURE, DSS-54, 11 HRS	2 - 3
MGS	TCM, DSS-34	3 - 4
SRTF	ROUTINE SUPPORT, DSS-34, 54, 1 HR	9 - 10
ULYS	JUPITER ENCOUNTER	14
VGR2	NEGOTIATED SUPPORT, DSS-34	3 - 4

Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #48 - 34BWG1

January (Week 3) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
CHDR	MOVE 14 PASSES TO 26M (DEEP, GNS, MGS, VGR2, ULYS)
CLU1	REQUESTED SUPPORT USING DSS-27, 46 (DEEP,GNS,VGR2,ULYS)
CLU2	REQUESTED SUPPORT USING DSS-27, 46 (DEEP,GNS,VGR2,ULYS)
CLU4	REQUESTED SUPPORT USING DSS-16, 27 (DSS, GNS, ULYS)
DEEP	REQUESTED SUPPORT
DSS	MOVE DSS-24 MAINTENANCE DAY TO TUESDAY AND REDUCE DSS-34 SUPPORT TO 4 HRS (MGS, ULYS, VGR2)
GNS	USE DSS-24, 54 FOR ROUTINE PASSES (MGS, VGR2)
IMAG	REQUESTED SUPPORT
MEX	REDUCE TO 8 HRS/PASS AND USE DSS-55 (DEEP, GNS, ULYS)
MGS	REDUCE TO 4 HRS/PASS (DEEP, DSS, VGR2)
SRTF	REQUESTED SUPPORT USING DSS-25, 55 (DEEP, DSS, GNS, MGS, VGR2, ULYS)
ULYS	MAXIMIZE REQUEST AT DSS-24 TO 12 HRS, REDUCE TO 4-HR PASSES AT DSS-34 AND 54 TO EQUAL 16 HRS/DAY (DEEP)
VGR2	REDUCE NEGOTIATED SUPPORT TO 5 HRS/DAY (DSS, MGS, ULYS)



Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #49 - 34BWG1

January (Week 4)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CHDR	ROUTINE SUPPORT, 1 HR	21
CLU1	ROUTINE SUPPORT, DSS-24, 34, 2 HRS	2
CLU2	ROUTINE SUPPORT, DSS-24, 34, 2 HRS	2
CLU4	ROUTINE SUPPORT, DSS-24, 2 HRS	1
DEEP	LAUNCH SUPPORT, DSS-34, 54	11 - 12
DSS	MAINTENANCE, 6 - 8 HRS	3
IMAG	ROUTINE SUPPORT, 50 MIN - 1.5 HRS	14
MERB	EDL ARRAY (DOY 025) DSS-63/65/54/55	1
MEX	ORBITAL SCIENCE, DSS-24, 54, 6 HRS	1
MEX	MSPA CAPTURE/MGS MAPPING, DSS-54, 11 HRS	2
/MGS	MSPA WITH MEX	
SRTF	ROUTINE SUPPORT, 1 HR	9 - 10
ULYS	JUPITER ENCOUNTER	21

Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #49 - 34BWG1

January (Week 4) (Continued)



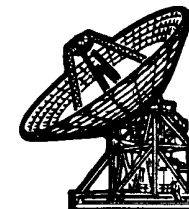
<u>USER</u>	<u>RECOMMENDATION</u>
CHDR	MOVE 14 PASSES TO THE 26M (DEEP, DSS, MEX, MERB, ULYS)
CLU1	REQUESTED SUPPORT USING DSS-27, 46 (DEEP, SRTF, ULYS, VGR2)
CLU2	REQUESTED SUPPORT USING DSS-27, 46 (DEEP, SRTF, ULYS, VGR2)
CLU4	REQUESTED SUPPORT USING DSS-16, 27 (DSS, MEX, ULYS)
DEEP	REDUCE DSS-54 PASSES TO 6 HRS (ULYS)
DSS	REQUESTED SUPPORT
IMAG	REQUESTED SUPPORT
MERB	REQUESTED SUPPORT
MEX	REQUESTED ORBITAL SCIENCE USING DSS-24 REDUCE MSPA PASSES WITH MGS TO 6 HRS OR REDUCE TO 8 HRS AND USE DSS-55 (DEEP, DSS, ULYS)
/MGS	REDUCE MSPA PASSES WITH MEX TO 6 HRS OR REDUCE TO 8 HRS AND USE DSS-55 (DEEP, DSS, ULYS)
SRTF	REQUESTED SUPPORT USING DSS-25, 54, 55 (DEEP, ULYS)
ULYS	REDUCE DSS-54 PASSES TO 6 HRS (DEEP)



Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #50 - DSS-34, 54
Late January (Week 5)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DEEP	LAUNCH SUPPORT, DSS-34, 54	4
ULYS	JUPITER ENCOUNTER	14
VGR2	ROUTINE SUPPORT, DSS-34	3 - 4

<u>USER</u>	<u>RECOMMENDATION</u>
DEEP	REQUESTED SUPPORT USING 34HEF (ULYS)
ULYS	REQUESTED SUPPORT
VGR2	REQUESTED SUPPORT USING DSS-43, 45 (ULYS)



Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #51 - 34BWG1
Early March (Week 11)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CHDR	ROUTINE SUPPORT, 1 HR	21
CLU1	ROUTINE SUPPORT, DSS-24, 34, 2 HRS	2
CLU2	ROUTINE SUPPORT, DSS-24, 34, 2 HRS	2
CLU4	ROUTINE SUPPORT, DSS-24, 2 HRS	1
DEEP	CRUISE, DSS-34, 54	0 - 1
DSS	MAINTENANCE, 6 - 8 HRS	3
GNS	ROUTINE AND MANEUVER (DOY 070 - 071)	11
IMAG	ROUTINE SUPPORT, 1.5 HRS	1
MEX	ORBITAL SCIENCE, DSS-24, 54, 6 HRS	7
MSGR	LAUNCH (DOY 070 - 074) DSS-34, 54	10
SRTF	ROUTINE SUPPORT, DSS-34, 54, 1 HR	4 - 5
ULYS	ROUTINE SUPPORT, 10 HRS	6 - 7
VGR2	ROUTINE SUPPORT, DSS-34	3 - 4
WIND	ROUTINE SUPPORT, 2.5 HRS	7

Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #51 - 34BWG1

Early March (Week 11) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
CHDR	REQUESTED SUPPORT
CLU1	REQUESTED SUPPORT USING DSS-15, 45 (DSS, GNS, MEX, MSGR)
CLU2	REQUESTED SUPPORT USING DSS-15,45 (DSS, GNS, MEX, MSGR)
CLU4	REQUESTED SUPPORT USING DSS-15 (DSS, GNS, MEX, MSGR)
DEEP	REQUESTED SUPPORT USING DSS-45, 65 (MEX, MSGR)
DSS	MOVE DSS-24 MAINTENANCE DAY TO TUESDAY DOY 069 AND REDUCE DSS-54 SUPPORT TO 4 HRS (GNS, MSGR)
GNS	REDUCE 2 DSS-54 MANEUVER PASSES TO 4 HRS AND USE DSS-24, 34 ONLY FOR ROUTINE SUPPORT (MSGR)
IMAG	REQUESTED SUPPORT
MEX	REDUCE SUPPORT TO 4 HRS/PASS (DSS, GNS, MSGR)
MSGR	REQUESTED SUPPORT
SRTF	REQUESTED SUPPORT USING 34HEF (GNS, MEX, MSGR)
ULYS	SPLIT 5 PASSES USING 5 HRS AT DSS-14 AND 5 HRS AT DSS-34 OR 43 (MSGR)
VGR2	MOVE 2 PASSES TO DSS-43 AND 5 TO DSS-45 (DSS, GNS, MSGR)
WIND	REQUESTED SUPPORT USING DSS-24, 54 (DSS, GNS, MEX)

Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #52 - 34BWG1
Early April (Week 15)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DEEP	CRUISE, DSS-34, 54	0 - 1
DSS	MAINTENANCE, 6 - 8 HRS	3
GNS	ROUTINE, 4 HRS	7
MEX	OCCULTATION AND ORB. SCI, DSS-24, 54, 6 - 16 HRS	14
MSGR	CRUISE, DSS-34, 54	2
SRTF	ROUTINE SUPPORT, DSS-34, 54, 1 HR	4 - 5
ULYS	ROUTINE SUPPORT, 10 HRS	6 - 7

<u>USER</u>	<u>RECOMMENDATION</u>
DEEP	REQUESTED SUPPORT USING DSS-15 (MEX, ULYS)
DSS	REQUESTED SUPPORT
GNS	REQUESTED SUPPORT
MEX	MOVE 3 ORBITAL SCIENCE PASSES TO 34HEF (DSS, GNS)
MSGR	REQUESTED SUPPORT USING DSS-45, 65 (MEX, ULYS)
SRTF	REQUESTED SUPPORT
ULYS	REDUCE TO 9-HR PASSES AND USE DSS-34 (MEX, SRTF)

Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #53 - 34BWG1
Mid-April (Week 17)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DEEP	CRUISE, DSS-34, 54	0 - 1
DSS	MAINTENANCE, 6 - 8 HRS	3
GNS	MANEUVER (DOY 113 - 114) AND ROUTINE	11
MEX	ORBITAL SCIENCE, DSS-24, 54, 6 HRS	7
MSGR	CRUISE, DSS-34, 54	2
ULYS	ROUTINE SUPPORT, DSS-24, 54, 10 HRS	6 - 7

<u>USER</u>	<u>RECOMMENDATION</u>
DEEP	REQUESTED SUPPORT USING DSS-15 (MEX, ULYS)
DSS	MOVE DSS-24 MAINTENANCE DAY TO TUESDAY DOY 111 (GNS)
GNS	REDUCE 2 ROUTINE PASSES TO 6-HRS/PASS (DSS)
MEX	MOVE 4 PASSES TO 34HEF (DSS, GNS)
MSGR	REQUESTED SUPPORT USING DSS-45, 65 (MEX, ULYS)
ULYS	REDUCE 4 PASSES TO 9 HRS AND MOVE TO DSS-34 SPLIT 2 PASSES USING 5 HRS AT DSS-24 AND 5 HRS AT DSS-34 FOR EACH PASS (GNS, MEX)

Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #54 - 34BWG1
Late August (Weeks 35 - 36)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CLU1	ROUTINE SUPPORT, DSS-24, 34, 2 HRS	2
CLU2	ROUTINE SUPPORT, DSS-24, 34, 2 HRS	2
CLU4	ROUTINE SUPPORT, DSS-24, 2 HRS	1
GNS	MANEUVER AND EARTH RETURN, 7 - 8 HRS	6 - 21
MSGR	ROUTINE SUPPORT, DSS-34, 54	1 - 2

<u>USER</u>	<u>RECOMMENDATION</u>
CLU1	REQUESTED SUPPORT USING DSS-15, 45 (GNS)
CLU2	REQUESTED SUPPORT USING DSS-15, 45 (GNS)
CLU4	REQUESTED SUPPORT USING DSS-15 (GNS)
GNS	REQUESTED SUPPORT
MSGR	REQUESTED SUPPORT IN WK 36 USING DSS-45, 65 (GNS)



Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #55 - 34BWG1
December (Weeks 50 - 53)



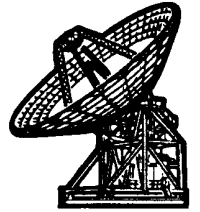
<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CHDR	ROUTINE SUPPORT, 1 HR	21
CLU1	ROUTINE SUPPORT, DSS-24, 34, 2 HRS	2
CLU2	ROUTINE SUPPORT, DSS-24, 34, 2 HRS	2
	ARRAY DSS-16/24/27/15, 1 HR	1
CLU4	ROUTINE SUPPORT, DSS-24, 2 HRS	1
DEEP	EARTH FLYBY/CRUISE, DSS-34, 54	4 - 10
DSS	MAINTENANCE, 6 - 8 HRS	3
M01O	RELAY, DSS-34	2 - 3
MEX	ORBITAL SCIENCE, DSS-24, 54, 6 HRS	7
MSGR	ROUTINE SUPPORT, DSS-34, 54	1 - 2
ULYS	ROUTINE SUPPORT, DSS-34, 54, 10 HRS	1 - 2



Resource Allocation Review

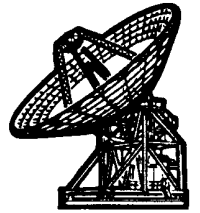
Requirements Analysis and Recommendations

2004 - Contention Period #55 - 34BWG1
December (Weeks 50 - 53) (Continued)

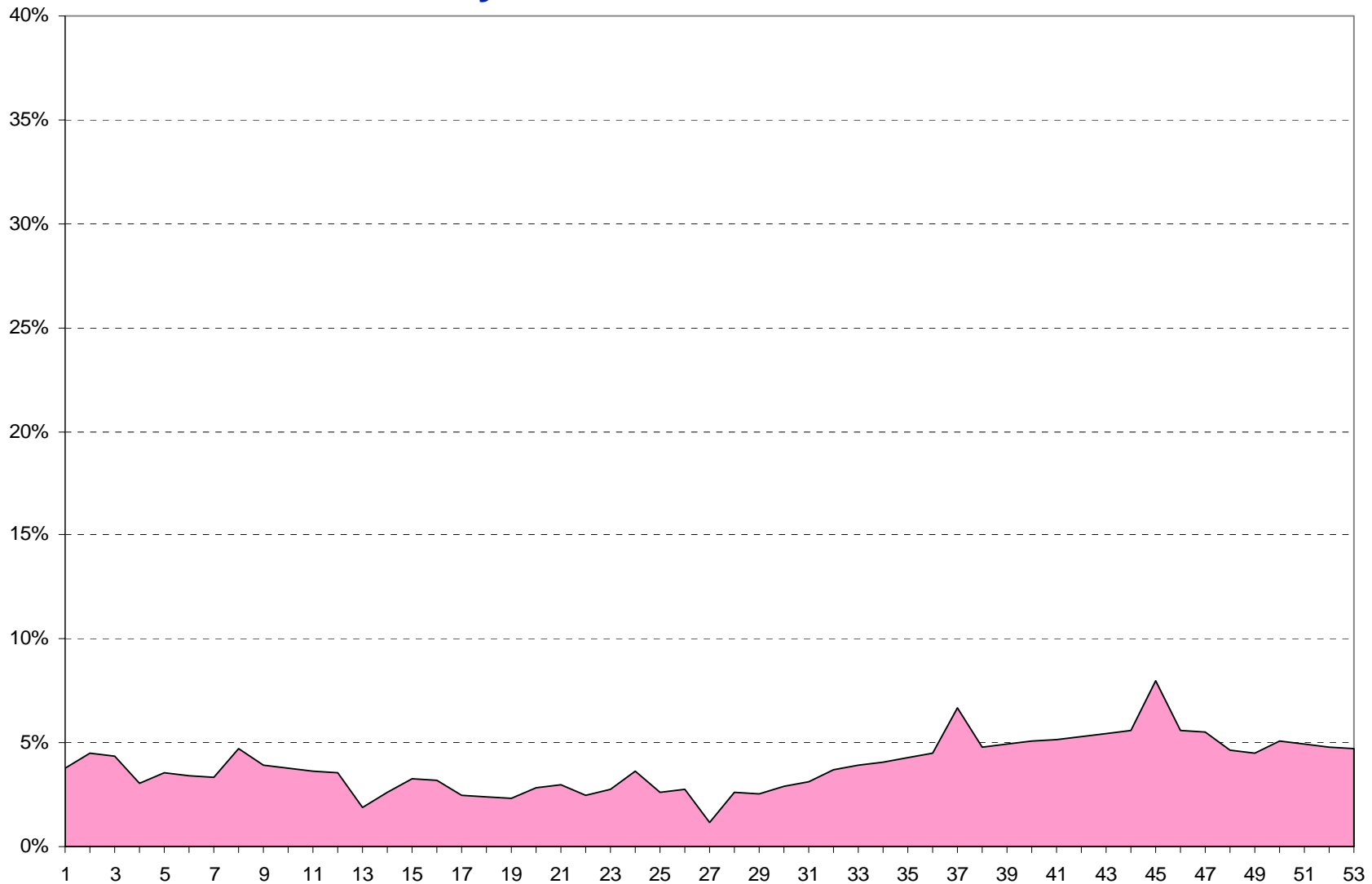


<u>USER</u>	<u>RECOMMENDATION</u>
CHDR	MOVE 11 PASSES TO THE 26M IN WK 52 - 53 (DEEP, DSS, MEX)
CLU1	REQUESTED SUPPORT
CLU2	REQUESTED SUPPORT
CLU4	REQUESTED SUPPORT
DEEP	REQUESTED SUPPORT
DSS	REDUCE TO 4 HRS AT EACH ANTENNA IN WK 52 - 53 (CHDR, CLU1, CLU2, CLU4, DEEP, MEX)
M010	REQUESTED SUPPORT USING DSS-45 (DEEP, DSS, MEX)
MEX	REQUESTED SUPPORT
MSGR	REQUESTED SUPPORT USING DSS-26 (DEEP, DSS, MEX)
ULYS	REQUESTED SUPPORT USING DSS-63 (DEEP, DSS, MEX)

Resource Allocation Review Requirements Analysis and Recommendations



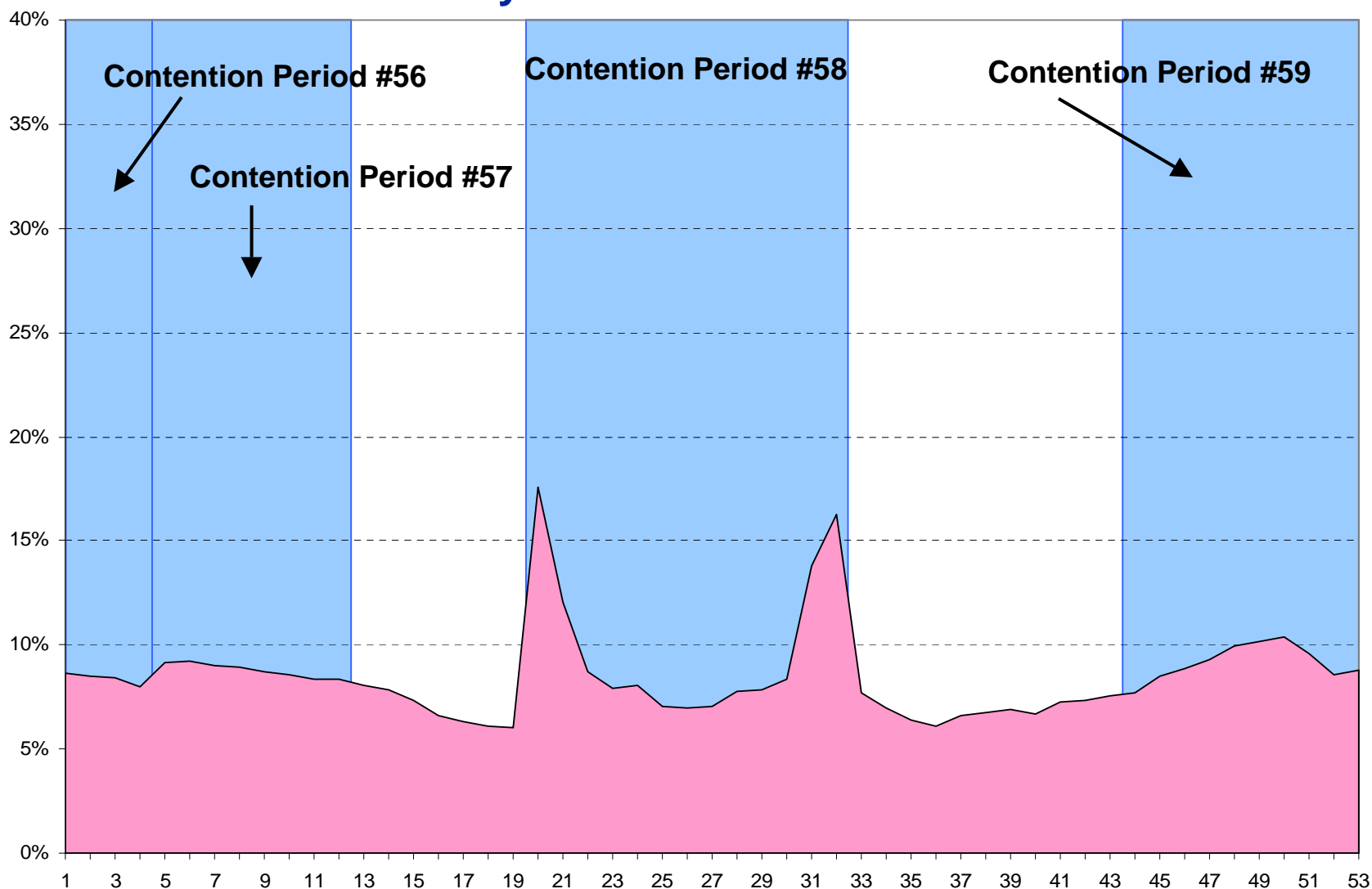
2004 Weekly Contention Percent - 34BWG2



Resource Allocation Review Requirements Analysis and Recommendations



2004 Weekly Contention Percent - 34HSB





Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #56 - 34HSB
January (Weeks 01 - 04)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
ACE	ROUTINE SUPPORT, 3.5 HRS	7
DSS	MAINTENANCE	1

<u>USER</u>	<u>RECOMMENDATION</u>
ACE	USE 26M FOR 1 PASS/WK (DSS)
DSS	REDUCE TO 6 HRS (34M USERS)

Note: Change needed for 34BWG1 USERS CHDR, CLU1, CLU2, and CLU4, moving to DSS-27.



Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #57 - 34HSB
Late January - Early April (Weeks 05 - 12)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
ACE	ROUTINE SUPPORT, 3.5 HRS	7
DSS	MAINTENANCE	1

<u>USER</u>	<u>RECOMMENDATION</u>
ACE	MOVE 1 PASS/WK TO 26M (DSS)
DSS	REQUESTED SUPPORT

Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #58 - 34HSB
Mid-May - Early August (Weeks 20 - 32)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
ACE	ROUTINE SUPPORT, 3.5 HRS	7
CLU2	ROUTINE SUPPORT, 2 HRS	1
CLU2II	ARRAY, WK 20, 24, 28, 32, DSS-16/24/27/15, 1 HR	1
CLU3	ROUTINE SUPPORT, 2 HRS	1
DSS	MAINTENANCE	1
SOHO	HSO SUPPORT	7

<u>USER</u>	<u>RECOMMENDATION</u>
ACE	MOVE 1 PASS/WK TO 26M (DSS)
CLU2	REQUESTED SUPPORT USING DSS-24, 34 IN WK 20 (SOHO)
CLU2II	DELETE DSS-27 SUPPORT FROM WK 20 ARRAY (SOHO)
CLU3	REQUESTED SUPPORT USING DSS-16, 46 IN WK 20 (SOHO)
DSS	REDUCE MAINTENANCE TO 6 HOURS (SOHO)
SOHO	REDUCE 1 PASS TO 4 HRS IN WK 20 (DSS)



Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #59 - 34HSB
Late October - December (Weeks 44 - 53)



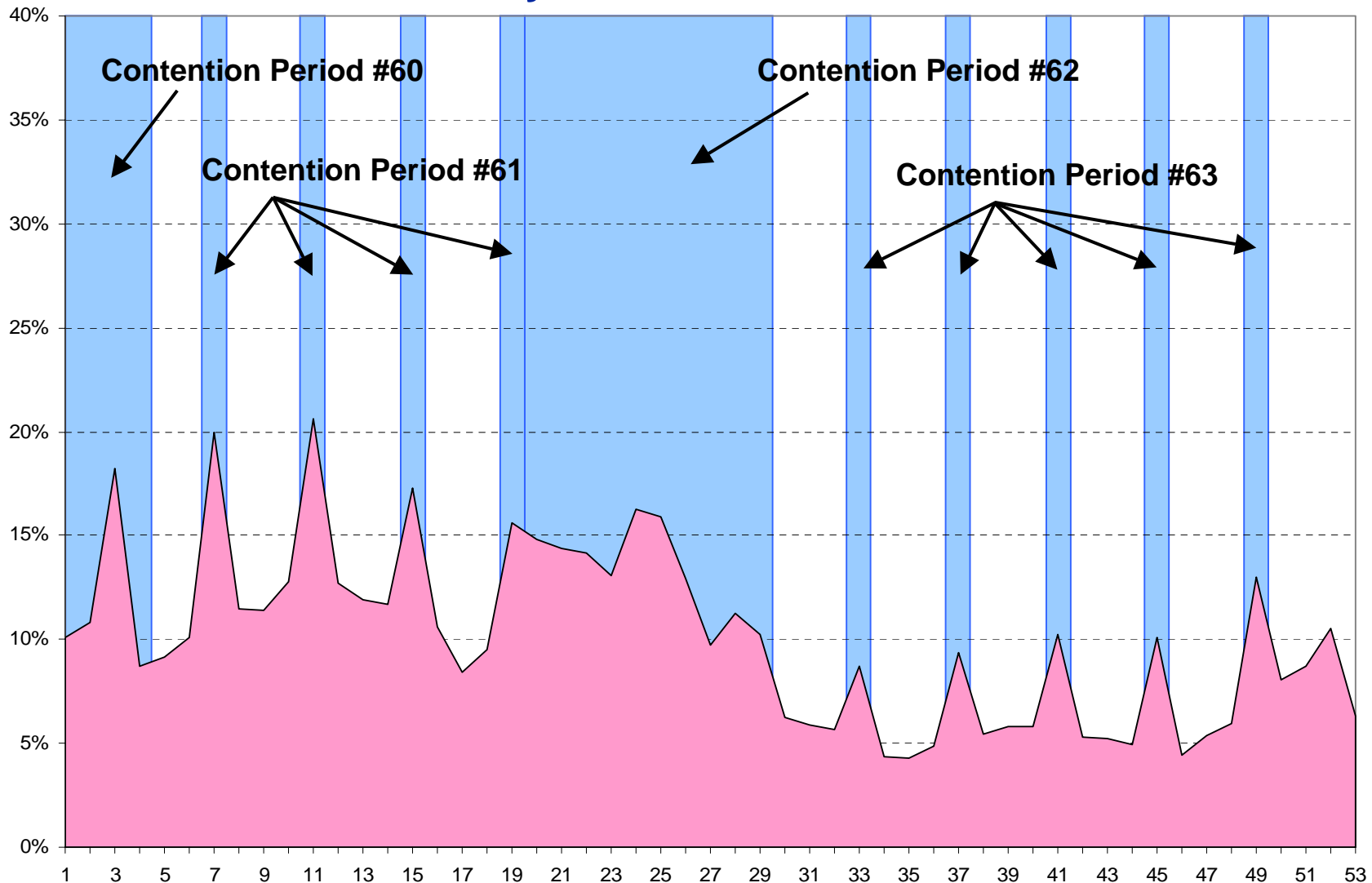
<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
ACE	ROUTINE SUPPORT, 3.5 HRS	7
DSS	MAINTENANCE	1

<u>USER</u>	<u>RECOMMENDATION</u>
ACE	MOVE 1 PASS/WK TO 26M (DSS)
DSS	REQUESTED SUPPORT

Resource Allocation Review Requirements Analysis and Recommendations



2004 Weekly Contention Percent - 26M





Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #60 - 26M
January (Weeks 01 - 04)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	MAINTENANCE, 6 - 8 HRS	3
SOHO	TSO, WK 03, AND ROUTINE, 1.6 - 9.6 HRS	21 - 23

<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REDUCE MAINTENANCE TO 4 HR SUPPORTS
SOHO	MOVE TSO SUPPORT TO WK 05 AND REDUCE 9.6-HR ROUTINE PASSES IN WK 01 - 04 TO 6 HRS

Note: Changes needed to accommodate 34BWG USERS ACE, CHDR, CLU1, CLU2, CLU4, and INTG moving to 26M during MERA and MERB approach and EDL.



Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #61 - 26M
Mid-February - Early May (Weeks 07, 11, 15, 19)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	MAINTENANCE, 6 - 8 HRS	3
POLR	RT ROUTINE SUPPORT, 2 HRS	7
	PB ROUTINE SUPPORT, 1 HR	28
SOHO	ROUTINE SUPPORT, 1.6 - 8 HRS	8
	TSO	15

<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REDUCE MAINTENANCE BY 2 HRS AT EACH ANTENNA (POLR, SOHO)
POLR	MOVE 12 PB AND 3 RT PASSES TO 34BWG1 (SOHO)
SOHO	MOVE TWO 8-HR ROUTINE AND 1 TSO PASS TO 34BWG1 (DSS, POLR)



Resource Allocation Review

Requirements Analysis and Recommendations

2004 - Contention Period #62 - 26M
Mid-May - Mid-July (Weeks 20 - 29)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	MAINTENANCE, 6 - 8 HRS	3
LUNA	ROUTINE SUPPORT, WK 24 - 29, DSS-16, 66	7
POLR	PB ROUTINE SUPPORT, 1HR	28
	RT ROUTINE SUPPORT, 2 HRS	7
SOHO	HSO, DSS-46, 66	14

<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REDUCE MAINTENANCE TO 4 HRS AT EACH ANTENNA/WK (LUNA, POLR)
LUNA	REQUESTED SUPPORT
POLR	MOVE 12 PB AND 3 RT PASSES/WK TO 34BWG1 (LUNA, SOHO)
SOHO	MOVE 2 PASSES/WK TO DSS-34, 54 (DSS, LUNA, POLR)

Resource Allocation Review Requirements Analysis and Recommendations



2004 - Contention Period #63 - 26M

Mid-August - November (Weeks 33, 37, 41, 45, 49)

<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	MAINTENANCE, 6 - 8 HRS	3
INTG	ROUTINE SUPPORT, DSS-16, 5.3 HRS	7
POLR	PB ROUTINE SUPPORT, 1 HR	28
	RT ROUTINE SUPPORT, 2 HR	7
SOHO	ROUTINE SUPPORT, 1.6 - 8 HRS	8
	TSO SUPPORT	15

<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REDUCE MAINTENANCE BY 2 HRS AT EACH ANTENNA (INTG, POLR, SOHO)
INTG	REQUESTED SUPPORT
POLR	MOVE 12 PB AND 3 RT PASSES IN EACH WK TO 34BWG1 (SOHO)
SOHO	MOVE 2 ROUTINE 8-HR PASSES AND 1 TSO PASS IN EACH WK TO 34BWG1 (DSS, POLR)

Resource Allocation Review

Supporting Material

May be found on the RAPSO WWW Homepage at:

<http://rapweb.jpl.nasa.gov>

- ◆ **Ongoing Users Negotiated Requirements**
Individual User Loading Profiles
- ◆ **Resource Allocation Review Board Information**
Supplemental Yearly Information containing
 - Major Events Timeline
 - User Loading Profiles
 - Monthly Subnet Support Projection